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SEWERAGE AND WATER BOARD

OF

NEW ORLEANS

SPECIFICATIONS FOR WATER MAIN POINT REPAIRS, WATER SERVICE CONNECTION, WATER VALVE AND FIRE HYDRANT REPLACEMENT AT VARIOUS SITES THROUGHOUT ORLEANS PARISH

CONTRACT NO. 2158



PROPOSALS TO BE OPENED

11:00 O'CLOCK A.M., LOCAL TIME ON JANUARY 21, 2022

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PUBLISHED - LEGAL 12/22/21, 12/29/21, 01/05/22 BIDS TO BE OPENED: January 21, 2022

SEWERAGE AND WATER BOARD OF NEW ORLEANS ADVERTISEMENT FOR CONTRACT 2158

Sealed proposals will be received by the Sewerage and Water Board of New Orleans, at the office of its Purchasing Agent, Room 133, 625 St. Joseph Street, New Orleans, Louisiana, 70165, up to 11:00 o'clock AM Local Time, and read at 11:30 a.m. on January 21, 2022.

CONTRACT 2158 WATER MAIN POINT REPAIRS, WATER SERVICE CONNECTION, WATER VALVE AND FIRE HYDRANT REPLACEMENT AT VARIOUS SITES THROUGHOUT ORLEANS PARISH

Sealed Bids for construction of **Contract 2158**, addressed to **Sewerage and Water Board of New Orleans**, will be received at the office of the Purchasing Agent, Room 133, 625 St. Joseph Street, New Orleans, Louisiana 70165, until 11:00 o'clock a.m., local time, on 21st Day of January, 2022 and read at 11:30 A.M., Any Bids received after the specified time will not be considered.

Bid Openings will continue to occur by the Sewerage and Water Board of New Orleans but Public attendance of these can only be done via teleconference. The teleconference information is as follows:

Microsoft Teams Meeting:

Join on your computer or mobile app

Click here to join the meeting

Or call in (audio only)

+1 504-224-8698,,195938542# United States, New Orleans

Phone Conference ID: 195 938 542#

The Project contemplated consists of Water Main Point repairs, water Service Connection, water valve and fire hydrant Replacement at Various Sites Throughout Orleans Parish. The Work will be completed in all respects within 365 calendar days from the date when the Contract Times commence to run.

Bidding Documents and proposal forms are available at no cost from Sewerage & Water Board of New Orleans' website: https://www2.swbno.org/business_bidspecifications.asp (Click on Doing Business, then Advertisements & Specifications)

Except for material suppliers, Bid Documents will be issued only to Contractors and/or Subcontractors who are licensed by the Louisiana State Licensing Board for Contractors, under Louisiana Revised Statutes 37:2150 through 37:2163 as amended, and who have furnished satisfactory evidence to the Purchasing Agent of the Board that they are licensed and are qualified to perform the work called for in the Contract Documents. Bids will be accepted from only those Contractors who possess a **Louisiana Contractor's License** in **Municipal and Public Works Construction.**

Each Bid **must** be submitted on the prescribed Bid Form and accompanied by Bid security as prescribed in the Instructions to Bidders. Envelopes containing bids and bid guarantee **must** be sealed, marked with the project name and with the Contractor's name as it appears on the license and the Louisiana Contractor's License number. The right is reserved to reject any and all bids or proposals for just cause. The Board also reserves the right to reject all proposals in the event that a formal agreement regarding funding from FEMA is not received prior to award of this Contract.

The Successful Bidder will be required to furnish the additional bond(s) and insurance prescribed in the Bidding Documents.

In order to perform public work, Bidder and Subcontractors shall hold all necessary licenses as required by the above referenced Louisiana Statutes.

A mandatory pre-bid conference will be held at 10:30 a.m. local time on January 13, 2022, via teleconference as follows:

Microsoft Teams Meeting: Join on your computer or mobile app

Click here to join the meeting

Or call in (audio only)

+1 504-22<u>4-8698, 369073207#</u> United States, New Orleans

Phone Conference ID: 369 073 207#

Owner's right is reserved to reject all Bids or any Bid not conforming to the intent and purpose of the Bidding Documents

Ghassan Korban
EXECUTIVE DIRECTOR
INSTRUCTION FOR BIDDERS

Robert Turner____
GENERAL SUPERINTENDENT

1. DEFINED TERMS

- 1.1. Terms used in these Instructions to Bidders have the meanings indicated in the General Conditions and Supplementary Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below:
- 1.1.1. *Issuing Office*—The office from which the Bidding Documents are to be issued and where the bidding procedures are to be administered: Purchasing Agent, Room 133, 625 St. Joseph Street, New Orleans, Louisiana 70165.

2. COPIES OF BIDDING DOCUMENTS

- 2.1. Complete sets of the Bidding Documents are available in electronic form on the Sewerage & Water Board of New Orleans website: https://www2.swbno.org/business_bidspecifications.asp (Click on Doing Business, then Advertisements & Specifications) Reproduction costs for any of the downloaded electronic Bidding Documents shall be borne by the Contractor.
- 2.2. Complete sets of Bidding Documents shall be used in preparing Bids. Neither Owner nor Engineer assumes responsibility for errors or misinterpretations resulting from use of incomplete sets of Bidding Documents.
- 2.3. Drawings included in the Bidding Documents are electronic .pdf files generated from electronic drawing files. Any reduction from actual size is indicated by a note or scale bar on Drawing.
- 2.4. Owner and Engineer, in making Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids for the Work and do not authorize or confer a license or grant for any other use.

3. QUALIFICATIONS OF BIDDERS

- 3.1. In order to perform public work, Bidder and its Subcontractors, prior to award of Contract or as otherwise required by the jurisdiction, shall hold or obtain such licenses as required by State Statutes, and federal and local Laws and Regulations.
- 3.2. Bidder is advised to carefully review those portions of the Bid Form requiring representations and certifications.

4. EXAMINATION OF BIDDING DOCUMENTS, OTHER RELATED DATA, AND SITE

- 4.1. Subsurface and Physical Conditions:
 - 4.1.1. The Supplementary Conditions identify:
- 4.1.1.1. Those reports known to Owner of explorations and tests of subsurface conditions at or contiguous to the Site.
- 4.1.1.2. Those drawings known to Owner of physical conditions relating to existing surface and subsurface structures at the Site.
- 4.1.2. Copies of reports and drawings referenced will be made available by Owner to any Bidder on request. Those reports and drawings are not part of the Contract Documents, but the "technical data" contained therein upon which Bidder is entitled to rely as provided in Paragraph 4.02 of the General Conditions has been identified and established in Paragraph 4.02 of the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any "technical data" or any other data, interpretations, opinions, or information contained in such reports or shown or indicated

in such drawings. Costs associated with making available copies of reports and drawings shall be borne by Bidder.

- 4.2. Underground Facilities: Information and data shown or indicated in the Bidding Documents with respect to existing Underground Facilities at or contiguous to the Site is based upon information and data furnished to Owner and Engineer by owners of such Underground Facilities, including Owner or others.
- 4.3. Hazardous Environmental Condition:
- 4.3.1. The Supplementary Conditions identify reports and drawings known to Owner relating to a Hazardous Environmental Condition identified at the Site.
- 4.3.2. Copies of reports and drawings referenced will be made available by Owner to any Bidder on request. Those reports and drawings are not part of the Contract Documents, but the "technical data" contained therein upon which Bidder is entitled to rely as provided in Paragraph 4.06 of the General Conditions has been identified and established in Paragraph 4.06 of the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any "technical data" or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings. Costs associated with making available copies of reports and drawings shall be borne by Bidder.
- 4.4. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to subsurface conditions, other physical conditions, and Underground Facilities, and possible changes in the Bidding Documents due to differing or unanticipated subsurface or physical conditions appear in Paragraphs 4.02 through 4.04 of the General Conditions. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to a Hazardous Environmental Condition at the Site, if any, and possible changes in the Contract Documents due to any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work, appear in Paragraph 4.06 of the General Conditions.
- 4.5. On request, Owner will provide each Bidder access to the Site to conduct such examinations, investigations, explorations, tests, and studies as Owner deems necessary for submission of a Bid. Bidder shall fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies. Bidder shall comply with all applicable Laws and Regulations relative to excavation and utility locates.
- 4.6. Related Work at Site: Reference is made to the General Requirements for identification of the general nature of other work that is to be performed at the Site by Owner or others (such as utilities and other prime contractors) that relates to the Work contemplated by these Bidding Documents. On request Owner will provide to each Bidder for examination, access to Contract Documents (other than portions thereof related to price) for such other work.
- 4.7. Safety: Paragraph 6.13.C of the General Conditions indicates that if an Owner safety program exists, it will be noted in the Supplementary Conditions.
- 4.8. It is responsibility of each Bidder before submitting a Bid to:
- 4.8.1. Examine and carefully study the Bidding Documents, other related data identified in the Bidding Documents, and any Addenda.
- 4.8.2. Visit the Site to become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- 4.8.3. Become familiar with to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work.
- 4.8.4. Carefully study all information provided and referenced in plans and specifications.
- 4.8.5. Consider the information known to Bidder; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Siterelated reports and drawings identified in the Bidding Documents.
- 4.8.6. Agree at the time of submitting its Bid that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the price(s) Bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
- 4.8.7. Become aware of the general nature of the work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- 4.8.8. Promptly give Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in Bidding Documents and confirm that written resolution thereof by Engineer is acceptable to Bidder.
- 4.8.9. Determine Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance of the Work.
- 4.9. Submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this article; that without exception the Bid is premised upon performing and furnishing the Work required by Bidding Documents and applying specific means, methods, techniques, sequences, and procedures of construction that may be shown or indicated or expressly required by Bidding Documents; that Bidder has given Engineer written notice of all conflicts, errors, ambiguities, and discrepancies that Bidder has discovered in Bidding Documents and the written

resolutions thereof by Engineer are acceptable to Bidder; and that Bidding Documents are generally sufficient to indicate and convey understanding of terms and conditions for performing and furnishing the Work.

5. SPECIAL PRODUCT REQUIREMENTS

5.1. Bidder's attention is directed to the Supplementary Conditions, Paragraph 6.03.

6. PREBID CONFERENCE

A MANDATORY Prebid conference will be held at 10:30 am local time on January 13, 2022 via Microsoft Teams as

follows: Join on your computer or mobile app

Click here to join the meeting

Or call in (audio only)

+1 504-224-8698,,369073207# United States, New Orleans

Phone Conference ID: 369 073 207#

6.1. Representatives of Owner and Engineer will be present to discuss the Project. Bidders are required to attend and participate in the conference. An award will be issued to Bidders that have a representative at the pre-bid conference. Procurement will transmit to prospective Bidders of record such Addenda as Engineer considers necessary in response to questions

arising at the conference. Oral statements may not be relied upon and will not be binding or legally effective.

7. SITE AND OTHER AREAS

7.1. Scattered Sites Through Out Orleans Parish as directed by Engineer.

7.2. N/A

8. INTERPRETATIONS AND ADDENDA

8.1. All questions about the meaning or intent of the Bidding Documents are to be submitted

To the Sewerage & Water Board Purchasing Department. Deadline to submit questions/clarifications will be **January 14**, **2022 by 5:00 p.m. to Shelita Sells**, Purchasing Analyst ssells@swbno.org. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda mailed or delivered to all parties recorded by the office issuing documents as having received the Bidding Documents. Questions received after the deadline may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

- 8.2. Addenda may also be issued to clarify, correct, or change the Bidding Documents as deemed advisable by Owner or Engineer.
- 8.3. Addenda issued in response to questions will be issued no later than 72 hours prior to bid opening.

9. BID SECURITY

- 9.1. Bid shall be accompanied by Bid security made payable to Owner in an amount of 5 percent of Bidder's maximum Bid price and in the form of a certified check, bank money order, or a Bid bond (on the attached form), issued by a surety meeting the requirements of Paragraph 5.01 and Paragraph 5.02 of the General Conditions.
- 9.2. Upon Notice of Award of the Contract, the Bid security of all bidders, other than the lowest two (2) formal bidders will be returned. The return of the Bid security to whom the Contract is awarded is conditioned upon the successful bidder furnishing the insurance required in the specifications and appearance before the Notary for the Sewerage and Water Board of New Orleans within ten (10) consecutive calendar days after notice by the Executive Director or designee of the award of the contract and executing the contract and furnishing bond for the faithful fulfillment thereof according to the attached specifications. The Bid security of the next lowest bidder will be returned as soon as the successful bidder has executed the Contract and furnished bond. If all bid proposals are rejected, all Bid security will be returned immediately.
- 9.3. Bid security of other Bidders whom Owner believes do not have a reasonable chance of receiving the award will be returned within 7 days after Bid opening.

10. CONTRACT TIMES

10.1. The number of days within which, or the dates by which, Milestones are to be achieved and the Work is to be substantially completed and ready for final payment are set forth in the Agreement.

11. LIQUIDATED DAMAGES

11.1. Provisions for liquidated damages, if any, are set forth in the Agreement.

12. SUBSTITUTE AND "OR-EQUAL" ITEMS

12.1. The Contract will be on the basis of materials and equipment specified or described in the Bidding Documents without consideration of possible substitute or "or-equal" items. Whenever it is specified or described in the Bidding Documents that a substitute or "equal" item of material or equipment may be furnished or used by Contractor if acceptable to Engineer, application for such acceptance will not be considered by Engineer until after the Effective Date of the Agreement.

13. WAGE RATES

- 13.1. The Work under these Bidding Documents is to be paid for by public funds; therefore, minimum prevailing wage rates published by the Secretary of the U.S. Department of Labor (see appended rate tables). Refer to Attachment #5 of the Supplementary Conditions for more information.
- 13.2. The successful bidder is to make available to the Board, complete records in connection with payment of employees during the term of the job in order to permit the Internal Audit Division to check as to adherence to the wage scale

presently in effect in accordance with U.S. Government standards.

14. PREPARATION OF BID

- 14.1. With each electronic copy of the Bidding Documents, Bidder will be furnished one separate Bid Form, and, if applicable, the Bid Bond Form. Contractor is to print and complete all pertinent documents included as the Original Form of Proposal.
- 14.2. All blanks on the Bid Form shall be completed by typing or printing with ink and the Bid Form signed in ink. Erasures or alterations shall be initialed in ink by the person signing the Bid Form. A Bid price shall be indicated for each Bid item, unit price item, and alternate listed therein.
- 14.3. A Bid by a corporation shall be executed in the corporate name by the president or a vice president or other corporate officer accompanied by evidence of authority to sign. The corporate seal shall be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation shall be shown.
- 14.4. A Bid by a partnership shall be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The official address of the partnership shall be shown.
- 14.5. A Bid by a limited liability company shall be executed in the name of the firm by a member and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm shall be shown.
- 14.6. A Bid by a joint venture shall be executed by each joint venturer in the manner indicated on the Bid Form. The official address of the joint venture shall be shown.
- 14.7. All names shall be typed or printed in ink below the signatures.
- 14.8. The Bid shall contain an acknowledgement of receipt of all Addenda; the numbers of which shall be filled in on the Bid Form.
- 14.9. Postal and e-mail addresses and telephone number for communications regarding the Bid shall be shown.
- 14.10. The Bid shall contain evidence of Bidder's authority and qualification to do business in the state where the Project is located, or Bidder shall covenant in writing to obtain such authority and qualification prior to award of the Contract and attach such covenant to the Bid. Bidder's state contractor license number and class, if applicable, shall also be shown on the

Bid Form.

15. BASIS OF BID; COMPARISON OF BIDS

- 15.1. Lump Sum:
- 15.1.1. Bidders shall submit a Bid on a lump sum basis as set forth in the Bid Form.
- 15.1.2. Bidders shall submit a Bid on a lump sum basis for the base Bid and include a separate price for each alternate described in the Bidding Documents as provided for in the Bid Form. The price for each alternate will be the amount added to or deleted from the base Bid if Owner selects the alternate. In the comparison of Bids, alternates will be applied in the same order as listed in the Bid Form.
- 15.2. Unit Price:
- 15.2.1. Bidders shall submit a Bid on a unit price basis for each item of Work Listed in the Unit Price Form.
- 15.2.2. The total of all prices will be the sum of the products of the estimated quantity of each item and the corresponding unit price. The final quantities and Contract Price will be determined in accordance with Paragraph 11.03 of the General Conditions.
- 15.2.3. Discrepancies between the indicated product of any row of figures on the Unit Price Form and the correct product will be resolved in favor of the correct product. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.
- 15.3. Alternates:
- 15.3.1. Alternates requiring pricing in the Bid Form are described in Section 01 11 00, Summary of Work, and in the Bid Form.
- 15.3.2. Indicate in Bid Form the amount to be added or subtracted from the base Bid for alternates described.
- 15.3.3. Include cost of all related work, including modifying surrounding work to integrate the Work of each alternate.
- 15.3.4. Alternates listed on Bid Form will be reviewed and accepted or rejected at Owner's option. Accepted alternates will be identified in the Agreement.

16. SUBMISSION OF BID

- 16.1. The Bid Form, Section 00 41 13 Louisiana Uniform Public Work Bid Form is to be completed and submitted with the Bid Security. The two (2) lowest bidders will have three (3) days following the bid opening to submit the following:
- 16.1.1. Additional Requirements, Bidder Declaration, Guarantees, and Emergency Procedures.
- 16.1.2. Affidavit
- 16.1.3. Voluntary Extensions of the Award of Contract

16.1.4. Affidavit of Non-collusion

- 16.2. A Bid shall be submitted no later than the date and time prescribed, and at the place indicated in the Invitation to Bid. Enclose Bid in a plainly marked package with the Project title (and, if applicable, the designated portion of the Project for which the Bid is submitted), name and address of Bidder, and accompanied by the Bid security and other required documents. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid shall be enclosed in a separate package plainly marked on the outside with the notation "BID ENCLOSED.
- 16.3. In accordance with LRS 37:2163, Bidders are required to certify they hold an active Contractor's license and indicate license number on Bid envelope. Bid envelopes received with no Contractor license number will not be opened and will automatically be rejected and considered nonresponsive.
- 16.4. Bidders are required to submit, in addition to the original Form of Proposal contained herein, three additional copies of the complete proposal including any and all inserts, drawings, brochures, or qualification data of any kind. Failure to submit the copies shall be considered as an informality and should not invalidate the bid, provided that within 24 hours after the bid opening or after the request has been made in writing by the Purchasing Agent for the Sewerage and Water Board of New Orleans, the bidder has furnished same to the Purchasing Department.

17. OPENING OF BIDS

Bids will be opened at the time and place indicated in the Invitation to Bid and unless obviously nonresponsive, read aloud publicly. The amounts of the base Bids and major alternates, if any, will be made available to Bidders after the opening of Bids.

18. BIDS TO REMAIN SUBJECT TO ACCEPTANCE

18.1. All Bids will remain subject to acceptance for the period of time stated in the Bid Form, but Owner may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

19. EVALUATION OF BIDS AND AWARD OF CONTRACT

- 19.1. Pursuant to Louisiana Statute 38:2225, a resident Bidder shall be allowed a preference over a nonresident Bidder from a state which gives or requires a preference to Bidders from that state. The preference shall be equal to the preference given or required by the state of the nonresident Bidder.
- 19.2. Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced or conditional Bids. Owner further reserves the right to reject the Bid of any Bidder whom it finds, after reasonable inquiry and evaluation, to not be responsible. Owner may also reject the Bid of any Bidder if Owner believes that it would not be in the best interest of the Project to make an award to that Bidder. Owner also reserves the right to waive all informalities not involving price, time, or changes in the Work and to negotiate contract terms with the Successful Bidder.
- 19.3. In evaluating Bids, Owner will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices, and other data, as may be requested in the Bid Form or prior to the Notice of Award.
- 19.4. In accordance with R.S. 38:2212(H), the Sewerage and Water Board recommended awards based on bid results will be released via email notification to all respondents either no sooner than fourteen days following the bid opening or after the recommendation of award by the SWBNO or the design professional, whichever occurs first. Bidders may also telephone the Purchasing Department of the Sewerage and Water Board in order to determine the bid results. Objection by a bidder to any recommended award must be made in writing to the Purchasing Agent or Assistant Purchasing within 72 hours (excluding Saturdays, Sundays and Holidays) after that recommended bid award notification

Fee

20. NOTARIAL FEE SCHEDULE

Contract Value

Notarial work for all Sewerage and Water Board of New Orleans construction contracts, requiring to be notarized:

	
Under \$1,000.00	\$174.00
\$1,000.00 to \$49,999.99	\$321.00
\$50,000.00 to \$499,999.99	\$816.00
\$500,000.00 to \$999,999.99	\$1,752.00
\$1,000,000.00 or over	\$3,505.00

21. CONTRACT SECURITY AND INSURANCE

21.1. Article 5 of the General Conditions, as may be modified by the Supplementary Conditions, sets forth Owner's requirements as to bonds and insurance. When Successful Bidder delivers executed Agreement to Owner, it shall be accompanied by such bonds.

22. SIGNING OF AGREEMENT

- 22.1 The proposal submitted by the staff-recommended bidder will be tentatively selected by the appropriate Sewerage and Water Board Committee meeting the final award of the contract will be made at the subsequent Board meeting. All prices bid must be held firm for 120 days or until final award of contract by the Board.
- 22.2 After submittal of required Insurance and Bonds, in form acceptable to the Sewerage and Water Board, the selected Bidder will be authorized by the Executive Director of the Board to appear before the City Notary to sign the contract within ten (10) consecutive calendar days from the date of the notice.

23. SALES AND USE TAXES

23.1 Applicable state and local sales and use taxes for purchase of materials and supplies furnished under this contract shall be paid by the Contractor. Such taxes shall be included in the lump sum bid for the work of this contract. The board shall be relieved of any obligation to pay these taxes.

23.2 ACT 318 OF 1958

- 23.2.1 Under the terms of Act 318 of 1958, of the Regular Session of the Legislature of the State of Louisiana, all things being equal, preference must be given to either (1) firms doing business in the State of Louisiana or (2) to products produced (or) grown (or) manufactured in the state.
- 23.2.2 Before any bill for supplies used shall be paid to any non-resident firm, a statement in writing shall be submitted by the seller to the effect that his firm has paid all taxes duly assessed by the State of Louisiana and its political subdivisions, including franchise taxes, to the state and its political subdivisions.

24. RETAINAGE

24.1. Provisions concerning retainage and Contractor's rights to deposit securities in lieu of retainage, if applicable, are set forth in the Agreement Notarial work

LOUISIANA UNIFORM PUBLIC BID FORM

TO:		BID FOR: Contract 2158-Water Main Point
	Repair, Purchasing Department, Room 133	Water Service Connections, Water
Valve,	625 St. Joseph St.	And Fire Hydrant Replacement At
Various		Sites Throughout Orleans Parish
b) has n personal facilities project, a dated: (Owner in	ersigned bidder hereby declares and represents that she/he: a) has carefully example treceived, relied on, or based his bid on any verbal instructions contrary to the distribution of the project and is familiar with the project site, and hereby proposes to provide as required to perform, in a workmanlike manner, all work and services for the all in strict accordance with the Bidding Documents prepared by: Sewerage 01/21/2022 To provide name of entity preparing bidding documents.)	he Bidding Documents or any addenda, c) has vide all labor, materials, tools, appliances and construction and completion of the referenced and Water Board of New Orleans and
Designer	must acknowledge all addenda. The Bidder acknowledges receipt of the for has assigned to each of the addenda that the Bidder is acknowledging)	·
	BASE BID : For all work required by the Bidding Documents (including any mates) the sum of:	and all unit prices designated "Base Bid" * but
		Dollars (\$)
as altern	NATES: For any and all work required by the Bidding Documents for Alterna ates in the unit price description. The No. 1 (Owner to provide description of alternate and state whether add or deduction).	tes including any and all unit prices designated
		Dollars (\$)
Alternat	te No. 2 (Owner to provide description of alternate and state whether add or dedu	
		Dollars (\$)
Alternat	te No. 3 (Owner to provide description of alternate and state whether add or dedu	
		Dollars (\$)
NAME	OF BIDDER:	
ADDRE	SS OF BIDDER:	
	ANA CONTRACTOR'S LICENSE NUMBER:OF AUTHORIZED SIGNATORY OF BIDDER:	
TITLE	OF AUTHORIZED SIGNATORY OF BIDDER:	
SIGNAT	TURE OF AUTHORIZED SIGNATORY OF BIDDER **:	
DATE:		

THE FOLLOWING ITEMS ARE TO BE INCLUDED WITH THE SUBMISSION OF THIS LOUISIANA UNIFORM PUBLIC WORK BID FORM:

^{*} The <u>Unit Price Form</u> shall be used if the contract includes unit prices. Otherwise it is not required and need not be included with the form. The number of unit prices that may be included is not limited and additional sheets may be included if needed.

** A CORPORATE RESOLUTION OR WRITTEN EVIDENCE of the authority of the person signing the bid for the public work as prescribed by LA R.S. 38:2212(B)(5).

BID SECURITY in the form of a bid bond, certified check or cashier's check as prescribed by LA R.S. 38:2218(A) attached to and made a part of this bid.

LOUISIANA UNIFORM PUBLIC WORK BID FORM **UNIT PRICE FORM**

TO: Sewerage and Water Board of New Orleans

Connection,

Purchasing Department, Rm 133

Various

625 St. Joseph St

New Orleans, LA 70165

BID FOR: Contract 2158 Water Main Point Repair, Water Service

Water Valve, and Fire Hydrant Replacement At

Sites Throughout Orleans Parish

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

D-000000000000000000000000000000000000	X Base Bid or □ Alt.#					
DESCRIPTION:	FURNISH AND	FURNISH AND INSTALL 8" PVC CL-150 WATER MAIN LINE INCL FITTINGS AND TIE-INS				
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
Item 1	925	L.F.				
DESCRIPTION:	X Base Bid or FURNISH AND		WATER MAIN LINI	E INCL FITTINGS AND TIE-INS		
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
Item 2	300	L.F.				
DESCRIPTION:	X Base Bid of FURNISH AND	r □ Alt.# INSTALL 8" WATER MAIN	OFFSET, INCL D.	I. FITTINGS		
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
Item 3	8	EA				
DESCRIPTION:	X Base Bid of FURNISH AND	r □ Alt.# INSTALL 12" WATER MAII	N OFFSET, INCL D	D.I. FITTINGS		
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
Item 4	8	EA				
DESCRIPTION:	X Base Bid or □ Alt. # INSTALL 5" BOARD SUPPLIED FIRE HYDRANT AND TIE-IN					
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		

Item 5

8

EA

DESCRIPTION:	X Base Bid of FURNISH AND	r □ Alt.# INSTALL 4"- 8" WATER V	ALVE, INCL. D.I. FI	TTINGS AND TIE-INS
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
Item 6	10	EA		
	L		l	
DESCRIPTION:	X Base Bid of FURNISH AND	r □ Alt.# INSTALL 10"- 12" WATER	VALVE, INCL. D.I.	FITTINGS AND TIE-INS
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
Item 7	8	EA		
DESCRIPTION:	X Base Bid of FURNISH AND	r □ Alt.# INSTALL 16"-20" WATER	VALVE, INCL. D.I.	FITTINGS AND TIE-INS*
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
Item 8	8	EA.		
DESCRIPTION:	X Base Bid of FURNISH AND	r □ Alt. # INSTALL 24"- 30" WATER	VALVE, INCL. D.I.	FITTINGS AND TIE-INS*
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
Item 9	6	EA.		
DESCRIPTION:	X Base Bid of FURNISH AND	r □ Alt. # INSTALL 36"- 48" WATER	VALVE, INCL. D.I.	FITTINGS AND TIE-INS*
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
Item 10	4	EA.		
DESCRIPTION:	X Base Bid of CONSTRUCTION	r □ Alt.# ON OF NEW WATER VALV	'E MANHOLE	
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
Item 11	6	EA.		
DESCRIPTION:	X Base Bid or Alt. # PLUG EXISITNG 4" THROUGH 16" WATER MAINS FILL WITH FLOWABLE MATERIAL (SAND/CEMENT MIXTURE)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
Item 12	1725	L.F.		
DESCRIPTION:				ATER SERVICE CONNECTION INCL TIE-INS AT THE
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)

Item 13

1000

L.F.

DESCRIPTION:	X Base Bid or □ Alt. # FURNISH AND INSTALL 1" POLYETHYLENE PIPE FOR WATER SERVICE CONNECTION INCL TIE-INS AT THE TO EXISTING METER AND MAIN (JACKING METHOD)					
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
Item 14	875	L.F.				

	DESCRIPTION:				WATER SERVICE CONNECTION INCL AND TIE-INS HOD)
	REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
ĺ	Item 15	45	L.F.		

DESCRIPTION:	X Base Bid or □ Alt. # FURNISH AND INSTALL 1-1/2" POLYETHYLENE PIPE FOR WATER SERVICE CONNECTION INCL TIE-INS AT THE TO EXISTING METER AND MAIN (JACKING METHOD)					
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
Item 16	1000	L.F.				

DESCRIPTION:	X Base Bid or □ Alt. # FURNISH AND INSTALL 2" POLYETHYLENE PIPE FOR WATER SERVICE CONNECTION INCL TIE-INS AT THE TO EXISTING METER AND MAIN (OPEN CUT METHOD)					
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
Item 17	550	L.F.				

DESCRIPTION:	X Base Bid or \square Alt. # FURNISH AND INSTALL 2" POLYETHYLENE PIPE FOR WATER SERVICE CONNECTION INCL TIE-INS AT THE TO EXISTING METER AND MAIN (JACKING METHOD)				
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
Item 18	550	L.F.			

DESCRIPTION:	X Base Bid or \square Alt.# FURNISH AND INSTALL 3" PVC CONDUIT FOR WATER SERVICE (BY JACKING OR OPEN CUT METHOD)				
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
Item 19	275	L.F.			

DESCRIPTION:	X Base Bid or □ Alt. # ADJUST COMPLETE METER BOX TO GRADE					
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
Item 20	15	EA.				

DESCRIPTION:	X Base Bid or □ Alt. # REPLACE BROKEN WATER METER BOX (5/8" TO 1")						
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)			
Item 21	15	EA.					
DESCRIPTION:	X Base Bid or □ Alt. # REMOVE MUD AND DEBRIS FROM WATER METER BOX						
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)			
Item 22	15	EA.					
DESCRIPTION:	X Base Bid of PERMIT AND T	· □ Alt. # TRAFFIC PLAN FOR WORK	CON NOTIFICATIO	ON STREETS			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)			
Item 23	15	EA.					
DESCRIPTION:	X Base Bid on PERMIT WITH	□ Alt. # TRAFFIC PLAN ON STATE	ROADS				
REF. NO.	QUANTITY:	QUANTITY: UNIT OF MEASURE: UNIT PRICE UNIT PRICE EXTENSION (Quantity times Unit Price					
Item 24	5	EA.					
DESCRIPTION:	X Base Bid on TRAFFIC CON	· □ Alt. # TROLS FOR WOTRK ON S	STATE ROADS				
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)			
Item 25	5	EA					
DESCRIPTION:	X Base Bid or □ Alt. # TRAFFIC CONTROLS FOR WOTRK ON NOTIFICATION STREETS						
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)			
Item 26	15	EA.					
L	•						
DESCRIPTION: X Base Bid or Alt. # FURNISH AND INSTALL ASPHALT INTERIM PAVEMENT - INCL, SAW CUTTING, REMOVAL AND DISPOSAL OF EXISTING ROADWAYS AND INSTALLING A MINIMUM 2" ASPHALT ON 6" BASE MATERIAL							

UNIT PRICE

UNIT PRICE EXTENSION (Quantity times Unit Price)

REF. NO.

Item 27

QUANTITY:

1000

UNIT OF MEASURE:

S.Y.

DESCRIPTION:	X Base Bid or ☐ Alt. # SAW CUTTING REMOVAL, DISPOSAL AND RESTORATION OF EXISTING RDWYS, REINFORCED CONCRETE (APPRX. 8" THICK)				
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
Item 28	825	S.Y.			
		L	I		
DESCRIPTION:			ND RESTORATION	I OF EXISTING RDWYS, ASPHALT FULL DEPTH	
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
Item 29	825	S.Y.			
DESCRIPTION:	X Base Bid of INSTALLATION		ON CONCRETE PA	AVED RDWYS (1.5" THICK)	
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
Item 30	825	S.Y.			
	1				
DESCRIPTION:	X Base Bid of SAW CUTTING		WAYS (6" THICK R	EINFORCED CONCRETE)	
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
Item 31	225	S.Y.			
			I		
DESCRIPTION:	X Base Bid of SAW CUTTING		WAYS (6" THICK R	EINFORCED CONCRETE WITH GRAVEL FINISH)	
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
Item 32	50	S.Y.			
DESCRIPTION:	X Base Bid of SAW CUTTING EXISTING)		WAYS (6" THICK R	EINFORCED CONCRETE WITH BRICK TO MATCH	
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
Item 33	75	S.Y.			
			1		
DESCRIPTION:	X Base Bid or Alt. # SAW CUTTING AND REPLACING SIDEWALKS (4" REINFORCED CONCRETE)				
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
Item 34	75	S.Y.			
	1	1	1		
DESCRIPTION:	X Base Bid or ☐ Alt. # SAW CUTTING AND REPLACING SIDEWALKS (4" THICK REINFORCED CONCRETE WITH GRAVEL FINISH)				
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
	1				

Item 35

75

S.Y.

DESCRIPTION:	X Base Bid or ☐ Alt. # SAW CUTTING AND REPLACING CONCRETE SIDEWALKS (REINFORCED CONCRETE WITH BRICK TO MATCH EXISTING)					
REF. NO.	QUANTITY: UNIT OF MEASURE: UNIT PRICE UNIT PRICE EXTENSION (Quantity times Unit Price)					
Item 36	75	S.Y.				

DESCRIPTION:	X Base Bid or Alt. # SAW CUTTING AND REPLACING CONCRETE CURB AND GUTTER TO MATCH EXISTING				
REF. NO.	QUANTITY: UNIT OF MEASURE: UNIT PRICE UNIT PRICE EXTENSION (Quantity times Unit				
Item 37	375	L.F.			

DESCRIPTION:	X Base Bid or Alt. # RESET GRANITE CURBS			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
Item 38	25	L.F.		

DESCRIPTION:	X Base Bid or Alt. # BATTURE SAND AND GRASS SOD AS DIRECTED			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
Item 39	125	S.Y.		

DESCRIPTION:	X Base Bid or □ Alt.# CONCRETE HANDICAP RAMP RESTORATION/INSTALLATION				
REF. NO.	QUANTITY: UNIT OF MEASURE: UNIT PRICE UNIT PRICE EXTENSION (Quantity times Unit P				
Item 40	4	EA.			

All quantities are estimated. The contractor will be paid based upon actual quantities as verified by the Owner

1-2 ADDITIONAL REQUIREMENTS

All blank spaces in this Proposal section shall be filled. A bid price shall be indicated for each bid item. Bids received without all such items completed will be considered non-responsive. The bid shall contain an acknowledgement of receipt of all Addenda in space provided. The Louisiana Uniform Public Work Bid Form & Unit Price Form (if applicable) and the amount of Deposit or Bid Bond five percent (5%) of the total amount of the proposal is REQUIRED to be submitted in a sealed envelope on bid opening date. The two (2) lowest numerical bidders have three (3) days after the bid opening (exclusive of Saturdays, Sundays and Holidays) to submit any additional information such as (Voluntary Extension Sheet, Affidavit, Economically Disadvantage Business Summary Sheet if applicable) as well as requirements of Sections 1-3 through 1-6 below. Failure to do so will render the bid non-responsive.

1-3 BIDDER DECLARATION

1 3 BIDDER DECEMBER 1101									
do hereby declare that the only person interested in this proposal and that no other person									
than the one herein named have any interest herein or in the contract proposed to be taken; that it is made without any connection with any other person or persons making proposal for the same work and that it is in all respects fair and without collusion or fraud; also that no member of the Sewerage and Water Board or of the City Council of the City of New Orleans or any officer or employee of the City of New Orleans or of the several boards thereof, who are by law excluded from participation herein, and directly or indirectly interested herein or in furnishing bond or in any portion of									
									the profits hereof.
									do hereby also declare that have LOUISIANA CONTRACTOR'S LICENSE in the field of with NUMBER
									And do further declare that have carefully examined the annexed specifications and the drawings
									furnished, and personally inspected the ground and that will contract to provide the necessary tools, machinery
and apparatus and other means of construction, and to furnish all labor and material specified in this contract or called									
for by the plans, necessary to complete the work in the manner specified and within the time mentioned in the									
specifications and according to the requirements of the Engineer, as herein set forth.									
1-4 In accordance with Louisiana Revised Statute 38:2227 the following affidavit shown on the next page must be									
submitted with the bid, or no later than 3 days after the bid opening (excluding Saturdays, Sundays, and Holidays).									
Failure to do so will render the bid non-responsive. Please note, THE AFFIDAVIT MUST BE NOTARIZED.									
1-5 GUARANTEES									
guarantee that the whole of the work under this contract will be substantially completed within									
[60 calendar days after the date of the "Commencement of Contract Times."									
In case of delay in the completion of the contract beyond the contract time of completion as determined by the Board									
hereby agree to pay, as liquidated damages, the sum of Two Thousand Dollars (\$2,000.00) for each calendar day of									
such delay, which liquidated damages shall become due by the mere elapsing of the delay without the necessity of									
putting in default.									
1-6 EMERGENCY PROCEDURES									
Contractor must furnish telephone numbers for routine or emergency telephone calls.									
NAME TITLE									
TELEPHONE NO.:									
NORMAL CALLS									
EMERGENCY									

STATE OF LOUISIANA

PARISH OF ORLEANS

AFFIDAVIT

	missioned and qualified and sworn in and for the State and Parish aforesaid,
personally came and appeared	who after being duly sworn, did depose
and say as	
follows:	
	itle) of (company);
listed in Louisiana Revised Statute 38:2227, specific	a plea of guilty or nolo contendere to any of the crimes, or equivalent federal crimes, ally: public bribery, corrupt influencing, extortion, money laundering, theft, ating, issuing worthless checks, bank fraud, forgery, contractors misapplication of
3) The contracting entity, person or corporation who been convicted or plead guilty to, a felony under stat or destruction of public records; (City Code Section	
-	rporators, directors, managers, officers, organizers, or members who have a
minimum	
ten percent interest ownership interest in the bidding	
(name)	
(name)	
(name)	
5) No other persons hold an ownership interest in the	
minimum ten percent interest ownership in the biddi any of the crimes, or equivalent federal crimes, listed influencing, extortion, money laundering, theft, iden bank fraud, forgery, contractors misapplication of pa 7) He/she is not delinquent on any taxes owed the Ci Section 2-8) The following sections apply only to Public Work 8) In accord with LA Revised Statute 38:2212.10 the system" of the Illegal Immigration Reform and Imm program to verify that all employees in the State of I 9) The entity represented herein shall continue, during status of all new employees in the state of Louisiana.	ity of New Orleans or fees/charges to the Sewerage and Water Board. (City Code s Contracts: e entity represented herein is registered and participates in the "Status verification igrant Responsibility Act of 1996, 8 U.S.C. 1324(a), known as the "E-Verify" Louisiana are legal citizens of the United States or are legal aliens. In the term of the contract, to utilize a status verification system to verify the legal
	AFFIANT
SWORN TO AND SUBSCRIBED BEFORE M	ME ON THIS
DAY OF	
NOTARY PUBLIC	Notary Id. No. or Bar Roll No.
PLEASE PRINT NAME OF NOTARY	

VOLUNTARY EXTENSIONS OF THE AWARD

If this bid is determined to be the lowest responsive and responsible bid, Bidder agrees to bid

extension of the award date by up to two (2) thirty (30) day periods in accordance with the provisions of Louisiana Revised Statue. Title 38, Section 2215 (A).
AGREED:
NAME OF BIDDER (TYPE OR PRINT)
SIGNATURE OF BIDDER
COMPANY NAME

* * * END OF SECTION * * *

BID BOND

Any singular reference to Bidder, Surety, Owner, or other	er party shall be considered plural where applica	able.
BIDDER (Name and Address):		
CURETY AL LALL CR. : IN CR.		
SURETY (Name and Address of Principal Place of Busi	ness):	
OWNER (Name and Address):		
BID		
Bid Due Date: Project (Brief Description Including Location):		
Project (Brief Beseription menuting Location).		
BOND		
Bond Number: Date (Not later than Bid due date):		
Penal sum		
(Words)	(Figures)	
Surety and Bidder, intending to be legally bound hereby.		
do each cause this Bid Bond to be duly executed on its b	enair by its authorized officer, agent, or represe	ntative.
BIDDER	SURETY	
(Seal)	-	(Seal)
Bidder's Name and Corporate Seal	Surety's Name and Corporate Seal	
Ву:	Ву:	
Signature and Title	Signature and Title (Attach Power of Attorney)	
	,	
Attest:	Attest:	
Signature and Title	Signature and Title	
Note: Above addresses are to be used for giving required	l notice.	

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NEW ORLEANS MASTER 469936

- 1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Surety's liability.
- 2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.
- 3. This obligation shall be null and void if:
 - 3.1. Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or
 - 3.2. All Bids are rejected by Owner, or
 - 3.3. Owner fails to issue a Notice of Award to
- 4. Payment under this Bond will be due and payable upon default by Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.
- 5. Surety waives notice of any and all defenses

- based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions shall not in the aggregate exceed 120 days from Bid due date without Surety's written consent.
- 6. No suit or action shall be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety and in no case later than one year after Bid due date.
- 7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.
- 8. Notices required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.
- 9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.
- 10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be

included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.

11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

END OF SECTION

AFFIDAVIT OF NONCOLLUSION

Each Bidder shall complete the following statement			
STATE OF			
} ss			
COUNTY OF			
Affiant is the agent authorized by the Bidder to subme that the Bidder has not been a party to any collusion competition by agreement to bid at a fixed price or to Parish, or City official or employee as to quantity, que Contract, or any other terms of said prospective contraction and any State, Parish, or City official concertor of value for special consideration in the letting of a configuration of the property of the proper	among Bio o refrain fr uality, or p tract; or in rning excha- contract. ency has be understand a fide empl	dders in restraint of freedom com bidding; or with any Sta price in the prospective any discussions between ange of money or other thing een employed or retained to ding for a commission, loyees or bona fide establish	a of ate, g
		Name of Contractor	
		Bidder (Affiant)	
Subscribed and sworn to before me this			20
My commission expires:			

END OF SECTION

DISADVANTAGED BUSINESS ENTERPRISE PROGRAM

1. POLICY TO ENHANCE THE USE OF DBE VENDORS

All vendors/contractors are encouraged to identify and use S&WB'S certified DBE Vendors to the fullest extent possible in major as well as minor purchases of heavy equipment, hardware supplies, etc.

Additionally, the originating Department will include within the specifications the most currently available approved DBE vendor listings.

The Sewerage and Water Board believes that developing such a policy would be a positive step to increase the dollar value of contracts awarded to DBE vendors and subcontractors.

2. ACCESS TO APPROVED VENDOR LISTS

The current listings of Vendors approved by the Sewerage and Water Board are available for use by the bidders on the Sewerage and Water Board external Website, WWW.SWBNO.ORG.

CONTRACT

THIS CONTRACT is by and between the Sewerage and Water Board of New Orleans ("Owner") and, ("Contractor") in consideration of the mutual covenants set forth herein, agree as follows:					
1.	WOR	VORK.			
1.1. Contractor shall complete the Work as specified or indicated in the Contract Documents. The Work is generally described as follows:					
		1.1.1. (2158 Water Main Point Repairs)			
2.	THE	PROJECT.			
a part	2.1. The Project for which the Work under the Contract Documents may be the whole or only rt is generally described as follows:				
		2.1.1 (2158 Water Main Point Repairs)			
3.	ENGI	NEER.			
3.1. The Project has been designed by <u>Treviall Daniels</u> (Designer) who is to act as the Engineer-of-Record under the oversight and administration of the Owner's Representative.					
4.	CON	TRACT TIMES.			
-	4.1. Time of the Essence: Time limits for Milestones, if any, Substantial Completion, and ompletion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.				
	4.2.	Days to Achieve Substantial Completion and Final Payment:			
		4.2.1. The Work shall be substantially completed within [60-90] calendar days from the date when the Contract Times commence to run as provided in Paragraph 2.03 of the General Conditions, and completed and ready for final payment in accordance with Paragraph 14.07 of the General Conditions within [60-90] calendar days after the date when the Contract Times commence to run.			
	4.3.	Liquidated Damages:			
		4.3.1. Should the Contractor fail to commence or start the work within the time allotted or fail to complete individual phases of the work within the times allotted for said individual phases, the Contractor shall pay to the Board the sum of \$2,000 liquidated damages for each calendar day beyond the times specified. If unforeseen circumstances are encountered at the work site, the Contractor may request in writing an extension in days for the completion of work. If granted, the extension of time must be approved in writing by the Engineer and submitted with the invoice.			

4.4. Night, Weekend, or Holiday Work:

4.4.1. Night, weekend or holiday work which requires the presence of an engineer or inspector will not be permitted except in cases of emergency or by permission of the Engineer. Except in cases of emergency, all requests for night, weekend or holiday work shall be submitted in writing at least seven calendar days prior to the work being performed. Any approved night, weekend or holiday work requires prior written authorization from the Engineer

5. CONTRACT PRICE.

	5.1.	Owner shall pay Contractor	and No/100
(\$		_) Dollars for completion of	the Work in accordance with the Contract Documents an
amount	in curi	ent funds equal to the sum of	of the amounts determined pursuant to the prices stated in
Contrac	ctor's Bi	d attached hereto as an exhibit	t.

6. PAYMENT PROCEDURES.

- 6.1. Submittal and Processing of Payments: Contractor shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.
- 6.2. Progress Payments and Retainage: Owner will make progress payments on account of the Contract Price on the basis of Contractor's Application for Payment on the date of each month as established in the preconstruction conference during performance of the Work as provided herein. All such payments will be measured by the Schedule of Values established as provided in Paragraph 2.07 of the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no Schedule of Values, as provided in the General Requirements.
 - 6.2.1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Engineer may determine or Owner may withhold, including but not limited to liquidated damages, in accordance with Paragraph 14.02 of the General Conditions:
 - 6.2.1.1. Ninety-five percent of Work completed for contracts in the amount of \$500,000.00 or greater (with the balance being retainage). Ninety percent of Work completed for contracts in an amount less than \$500,000.00 (with the balance being retainage).
 - 6.2.2 In accordance with Louisiana Revised Statute 38:2249, Contractor may withdraw up to the entire retained amount if they deposit an equal amount in a Certificate of Deposit issued by a commercial bank or savings and loan located in Louisiana.
 - 6.2.3. In accordance with Louisiana Revised Statute 38:2248(A), retainage will be released within 45 days of Final Acceptance by the Sewerage and Water Board of New Orleans' Board of Directors.

6.2.4. Upon Substantial Completion, Owner will pay an amount sufficient to increase total payments to Contractor to 100 percent of the Work completed, less such amounts as Engineer will determine in accordance with Paragraph 14.02.B.5 of the General Conditions and less 200 percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the tentative list of items to be completed or corrected attached to the certificate of Substantial Completion.

6.3. Final Payment:

6.3.1. Upon final completion and acceptance of the Work in accordance with Paragraph 14.07 of the General Conditions, Owner will pay the remainder of the Contract Price as recommended by Engineer as provided in Paragraph 14.07.

7. CONTRACTOR'S REPRESENTATIONS.

- 7.1. Contractor makes the following representations:
 - 7.1.1. Contractor has examined and carefully studied the Contract Documents and the other related data identified in the Bidding Documents.
 - 7.1.2. Contractor has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 - 7.1.3. Contractor is familiar with and is satisfied as to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work.
 - 7.1.4. Contractor has carefully studied: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and drawings of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) if any, which have been identified in Paragraph 4.02 of the Supplementary Conditions as containing reliable "technical data", and (2) reports and drawings of Hazardous Environmental Conditions, if any, at the Site which have been identified in Paragraph 4.06 of the Supplementary Conditions as containing reliable "technical data."
 - 7.1.5. Contractor has considered the information known to Contractor; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and Siterelated reports and drawings identified in the Contract Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, including any specific means, methods, techniques, sequences, and procedures of construction expressly required by the Contract Documents; and (3) Contractor's safety precautions and programs.
 - 7.1.6. Based on the information and observations referred to above, Contractor does not consider that any further examinations, investigations, explorations, tests, studies, or data

are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract Documents.

- 7.1.7. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
- 7.1.8. Contractor has given Engineer written notice of conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
- 7.1.9. The Contract Documents are generally sufficient to indicate and convey understanding of terms and conditions for performance and furnishing of the Work.

8. CONTRACT DOCUMENTS.

- 8.1. Contents:
 - 8.1.1. The Contract Documents that are attached to this Contract (except as expressly noted otherwise) consist of the following:
 - noted otherwise) consist of the following:

 8.1.1.1. This Contract

 8.1.1.2. Payment and Performance Bond:

 8.1.1.3. General Conditions:

 8.1.1.4. Supplementary Conditions:
 - 8.1.1.5. Specifications as listed in the table of contents:
 - 8.1.1.6. Drawings consisting of _____ sheets with each sheet bearing the following general title:_____
 - 8.1.1.7. Addenda: _____
 - 8.1.2. Exhibits to this Contract (enumerated as follows):
 - 8.1.2.1. Contractor's Bid
 - 8.1.2.2 Contractor's Insurance Certificates
 - 8.1.2.3 Contractor's Corporate Resolution
 - 8.1.3. The following which may be delivered or issued on or after the Effective Date of the Contract and are not attached hereto:
 - 8.1.3.1. Notice to Proceed

- 8.1.3.2. Work Change Directives
- 8.1.3.3. Change Order(s)
- 8.2. There are no Contract Documents other than those listed above in this Article.
- 8.3. The Contract Documents may only be amended, modified, or supplemented as provided in Paragraph 3.04 of the General Conditions.

9. MISCELLANEOUS.

- 9.1. Terms used in this Contract will have the meanings stated in the General Conditions and the Supplementary Conditions.
- 9.2. Successors and Assigns: Owner and Contractor each binds itself, its partners, successors, assigns, and legal representatives to the other party hereto, its partners, successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.
- 9.3. Severability: Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

9.4. Assignment of Contract:

9.4.1. No assignment by a party hereto of any rights under or interests in the Contract shall be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, monies that may become due and monies that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment shall release or discharge the assignor from any duty or responsibility under the Contract Documents.

9.5. Contractor's Certifications:

- 9.5.1. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this paragraph:
 - 9.5.1.1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process or in Contract execution;
 - 9.5.1.2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract Price at artificial

noncompetitive levels, or (c) to deprive Owner of the benefits of free and open competition;

- 9.5.1.3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, noncompetitive levels; and
- 9.5.1.4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

10. Force Majeure:

Neither party shall be liable for any failure to make or accept one or more deliveries arising out of any embargo, war, fire, flood, earthquake, epidemic or other calamity, act of God or of the public enemy, governmental act (including, but not restricted to, any government priority, preference, requisition, allocation, interference, restraint or seizure, or the necessity of complying with any governmental order, directive, ruling or request) or by any strike or labor dispute involving the owner, or any manufacturer, supplier or carrier of the machinery, materials or supplies required hereunder, or any other similar circumstance beyond the control of the party.

11. Jurisdiction and Venue:

Moreover, Contractor, by act of signing this Contract, consents and yields to the jurisdiction of the Civil District Court of the Parish of Orleans of the State of Louisiana and does formally waive any plea of lack of jurisdiction, on account of their residence elsewhere in the event of suit under this Contract. This Contract shall be governed by and shall be interpreted in accordance with the laws of the State of Louisiana. Contractor agrees that any suit arising out of this Contract shall be brought in the Civil District Court for the Parish of Orleans and Contractor hereby waives any objection to improper venue and agrees to submit to the jurisdiction of said court.

IN WITNESS WHEREOF, Owner and Contractor have signed this Contract in triplicate. One counterpart each has been delivered to Owner, Contractor, and Engineer. All portions of the Contract Documents have been signed or identified by Owner and Contractor or on their behalf. This Contract will be effective on ______, 2021 (which is the Effective Date of the Contract). SEWERAGE AND WATER BOARD OF NEW ORLEANS BY: GHASSAN KORBAN, EXECUTIVE DIRECTOR WITNESSES: Print: _____ Print: _____ NOTARY PUBLIC The foregoing contract is approved as to form. New Orleans, Louisiana day of , 2021. YOLANDA Y. GRINSTEAD, SPECIAL COUNSEL SEWERAGE AND WATER BOARD OF NEW ORLEANS IN WITNESS WHEREOF, Owner and Contractor have signed this Contract in triplicate. One counterpart each has been delivered to Owner, Contractor, and Engineer. All portions of the Contract Documents have been signed or identified by Owner and Contractor or on their behalf. This Contract will be effective on ______, 2021 (which is the Effective Date of the Contract). (COMPANY'S NAME) LOUISIANA LICENSE NO. BY: _____ TITLE:____ WITNESSES: Print:

Print:	
RECOR	DED IN THE PARISH OF ORLEANS
STATE	OF LOUISIANA
ON	
INSTR.#	

[END OF SECTION]

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GENERAL CONDITIONS ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

1.01 Defined Terms

- A. Wherever used in the Bidding Requirements or Contract Documents and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
- 1. Addenda—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
- 2. *Agreement*—The written instrument which is evidence of the agreement between Owner and Contractor covering the Work.
- 3. Application for Payment—The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
- 4. *Asbestos*—Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.
- 5. *Bid*—The offer or proposal of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
- 6. *Bidder*—The individual or entity who submits a Bid directly to Owner.
- 7. *Bidding Documents*—The Bidding Requirements and the proposed Contract Documents (including all Addenda).
- 8. *Bidding Requirements*—The advertisement or invitation to bid, Instructions to Bidders, Bid security of acceptable form, if any, and the Bid Form with any supplements.
- 9. Change Order—A document recommended by Engineer which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Agreement.
- 10. Claim—A demand or assertion by Owner or Contractor seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.
- 11. *Contract*—The entire and integrated written agreement between the Owner and Contractor concerning the Work. The Contract supersedes prior negotiations,

- representations, or agreements, whether written or oral. 12. *Contract Documents*—Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents. Approved Shop Drawings, other Contractor submittals, and the reports and drawings of subsurface and physical conditions are not Contract Documents.
- 13. Contract Price—The moneys payable by Owner to Contractor for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of Paragraph 11.03 in the case of Unit Price Work).
- 14. *Contract Times*—The number of days or the dates stated in the Agreement to: (i) achieve Milestones, if any; (ii) achieve Substantial Completion; and (iii) complete the Work so that it is ready for final payment as evidenced by Engineer's written recommendation of final payment.
- 15. *Contractor*—The individual or entity with whom Owner has entered into the Agreement.
- 16. Cost of the Work—See Paragraph 11.01 for definition.
- 17. *Drawings*—That part of the Contract
- Documents prepared or approved by Engineer which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings and other Contractor submittals are not Drawings as so defined.
- 18. Effective Date of the Agreement—The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.
- 19. *Engineer*—The individual or entity named as such in the Agreement.
- 20. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.
- 21. *General Requirements*—Sections of Division 1 of the Specifications.
- 22. Hazardous Environmental Condition—The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto.
- 23. *Hazardous Waste*—The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.
- 24. Laws and Regulations; Laws or Regulations—Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
- 25. *Liens*—Charges, security interests, or encumbrances upon Project funds, real property, or personal property.

- 26. *Milestone*—A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.
- 27. Notice of Award—The written notice by Owner to the Successful Bidder stating that upon timely compliance by the Successful Bidder with the conditions precedent listed therein, Owner will sign and deliver the Agreement.

 28. Notice to Proceed—A written notice given by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work under the Contract Documents.
- 29. *Owner*—The individual or entity with whom Contractor has entered into the Agreement and for whom the Work is to be performed.
- 30. *PCBs*—Polychlorinated biphenyls.
- 31. *Petroleum*—Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.
- 32. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.

 33. *Project*—The total construction of which the Work to be performed under the Contract Documents may
- be the whole, or a part.

 34. *Project Manual*—The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.
- 35. *Radioactive Material*—Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.
- 36. *Resident Project Representative*—The authorized representative of Engineer who may be assigned to the Site or any part thereof.
- 37. Samples—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.
- 38. Schedule of Submittals—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements to support scheduled performance of related construction activities.
- 39. Schedule of Values—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

- 40. Shop Drawings—All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.
- 41. Site—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by Owner which are designated for the use of Contractor.
- 42. Specifications—That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable thereto.
 43. Subcontractor—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work at the Site.
- 44. Substantial Completion—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.
- 45. Successful Bidder—The Bidder submitting a responsive Bid to whom Owner makes an award.
 46. Supplementary Conditions—That part of the Contract Documents which amends or supplements these General Conditions.
- 47. Supplier—A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the

Work by Contractor or Subcontractor.

- 48. *Underground Facilities*—All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
 49. *Unit Price Work*—Work to be paid for on the basis of unit prices.
- 50. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such

construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.

51. Work Change Directive—A written statement to Contractor issued on or after the Effective Date of the Agreement and signed by Owner and recommended by Engineer ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

1.02 Terminology

A. The words and terms discussed in Paragraph 1.02.B through F are not defined but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.

B. Intent of Certain Terms or Adjectives:

1. The Contract Documents include the terms "as allowed," "as approved," "as ordered," "as directed" or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives "reasonable," "suitable," "acceptable," "proper," "satisfactory," or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Paragraph 9.09 or any other provision of the Contract Documents.

C. Day:

- 1. The word "day" means a calendar day of 24 hours measured from midnight to the next midnight. D. *Defective:*
- 1. The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it:

a. does not conform to the Contract

Documents; or

b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or

c. has been damaged prior to Engineer's

recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 14.04 or 14.05).

E. Furnish, Install, Perform, Provide:

- 1. The word "furnish," when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
- 2. The word "install," when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
- 3. The words "perform" or "provide," when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
- 4. When "furnish," "install," "perform," or "provide" is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of Contractor, "provide" is implied. F. Unless stated otherwise in the Contract

Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 – PRELIMINARY MATTERS

2.01 *Delivery of Bonds and Evidence of Insurance*A. When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.

B. Evidence of Insurance: Before any Work at the Site is started, Contractor and Owner shall each deliver to the other, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance which either of them or any additional insured may reasonably request) which Contractor and Owner respectively are required to purchase and maintain in accordance with Article 5.

2.02 Copies of Documents

A. Owner shall furnish to Contractor up to ten printed or hard copies of the Drawings and Project Manual. Additional copies will be furnished upon request at the cost of reproduction.

2.03 Commencement of Contract Times; Notice to Proceed

A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Agreement or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Agreement. In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier.

2.04 Starting the Work

A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to the date on which the Contract Times commence to run.

2.05 Before Starting Construction

A. *Preliminary Schedules:* Within 10 days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), Contractor shall submit to Engineer for timely review:

- 1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents;
- 2. a preliminary Schedule of Submittals; and
- 3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.
- 2.06 Preconstruction Conference; Designation of Authorized Representatives

A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.05.A, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.

B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit instructions, receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.07 Initial Acceptance of Schedules

A. At least 10 days before submission of the first Application for Payment a conference attended by Contractor, Engineer, and others as appropriate will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph

2.05.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be

made to Contractor until acceptable schedules are submitted to Engineer.

- 1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
- 2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
- 3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work.

ARTICLE 3 – CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.01 Intent

A. The Contract Documents are complementary; what is required by one is as binding as if required by all. B. It is the intent of the Contract Documents to describe a functionally complete project (or part thereof) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that reasonably may be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the indicated result will be provided whether or not specifically called for, at no additional cost to Owner.

C. Clarifications and interpretations of the Contract Documents shall be issued by Engineer as provided in Article 9.

3.02 Reference Standards

A. Standards, Specifications, Codes, Laws, and Regulations

- 1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
- 2. No provision of any such standard, specification, manual, or code, or any instruction of a Supplier, shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees, from those set forth in the Contract Documents. No such provision or instruction shall be effective to assign to Owner, Engineer, or any of their officers, directors,

members, partners, employees, agents, consultants, or subcontractors, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

3.03 Reporting and Resolving Discrepancies

A. Reporting Discrepancies:

- 1. Contractor's Review of Contract Documents
 Before Starting Work: Before undertaking each part of the
 Work, Contractor shall carefully study and compare the
 Contract Documents and check and verify pertinent
 figures therein and all applicable field measurements.
 Contractor shall promptly report in writing to Engineer
 any conflict, error, ambiguity, or discrepancy which
 Contractor discovers, or has actual knowledge of, and
 shall obtain a written interpretation or clarification from
 Engineer before proceeding with any Work affected
 thereby.
- 2. Contractor's Review of Contract Documents
 During Performance of Work: If, during the performance
 of the Work, Contractor discovers any conflict, error,
 ambiguity, or discrepancy within the Contract
 Documents, or between the Contract Documents and (a)
 any applicable Law or Regulation, (b) any standard,
 specification, manual, or code, or (c) any instruction of
 any Supplier, then Contractor shall promptly report it to
 Engineer in writing. Contractor shall not proceed with the
 Work affected thereby (except in an emergency as
 required by Paragraph
- 6.16.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in Paragraph 3.04.
- 3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.
- B. Resolving Discrepancies:
- 1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:
- a. the provisions of any standard, specification, manual, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference in the Contract Documents); or
- b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).
- 3.04 Amending and Supplementing Contract Documents
- A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof by either a

- Change Order or a Work Change Directive.
- B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways:
- 1. A Field Order;
- 2. Engineer's approval of a Shop Drawing or Sample (subject to the provisions of Paragraph 6.17.D.3); or
- 3. Engineer's written interpretation or clarification.
- 3.05 Reuse of Documents
- A. Contractor and any Subcontractor or Supplier shall not:
- 1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media editions; or
- 2. reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer.
- B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes. 3.06 *Electronic Data*
- A. Unless otherwise stated in the Supplementary Conditions, the data furnished by Owner or Engineer to Contractor, or by Contractor to Owner or Engineer, that may be relied upon are limited to the printed copies (also known as hard copies). Files in electronic media format of text, data, graphics, or other types are furnished only for the convenience of the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.
- B. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the transferring party.
- C. When transferring documents in electronic media format, the transferring party makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the data's creator.

ARTICLE 4 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS; REFERENCE POINTS

4.01 Availability of Lands

A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work. Owner will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If Contractor and Owner are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of any delay in Owner's furnishing the Site or a part thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.

B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which the Work is to be performed and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.

C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

4.02 *Subsurface and Physical Conditions*A. *Reports and Drawings*: The Supplementary Conditions identify:

- 1. those reports known to Owner of explorations and tests of subsurface conditions at or contiguous to the Site; and
- 2. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities). B. Limited Reliance by Contractor on Technical Data Authorized: Contractor may rely upon the accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors with respect to:
- 1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed

by Contractor, and safety precautions and programs incident thereto; or

2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or

3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information.

4.03 Differing Subsurface or Physical Conditions
A. Notice: If Contractor believes that any subsurface or physical condition that is uncovered or revealed either:

1. is of such a nature as to establish that any "technical data" on which Contractor is entitled to rely as provided in Paragraph 4.02 is materially inaccurate; or 2. is of such a nature as to require a change in

the Contract Documents; or

3. differs materially from that shown or indicated in the Contract Documents; or

4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

5. then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

B. Engineer's Review: After receipt of written notice as required by Paragraph 4.03.A, Engineer will promptly review the pertinent condition, determine the necessity of Owner's obtaining additional exploration or tests with respect thereto, and advise Owner in writing (with a copy to Contractor) of Engineer's findings and conclusions.

C. Possible Price and Times Adjustments:

1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition

causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

a. such condition must meet any one or more of the categories described in Paragraph 4.03.A; and

b. with respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraphs 9.07 and 11.03.

2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times if:

a. Contractor knew of the existence of such conditions at the time Contractor made a final commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or b. the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such final commitment; Or c. Contractor failed to give the written notice as required by Paragraph 4.03.A.

3. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be made therefor as provided in Paragraph 10.05. However, neither Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors shall be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

4.04 Underground Facilities

A. Shown or Indicated: The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary

Conditions:

- 1. Owner and Engineer shall not be responsible for the accuracy or completeness of any such information or data provided by others; and
- 2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:
- a. reviewing and checking all such information and data; b. locating all Underground Facilities shown or indicated in the Contract Documents; c. coordination of the Work with the owners of such Underground Facilities, including Owner, during construction; and
- d. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work
- B. Not Shown or Indicated:
- 1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown

or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer. Engineer will promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility. 2. If Engineer concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Price or Contract Times, or both, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment in Contract Price or Contract Times. Owner or Contractor may make a Claim therefor as provided in Paragraph 10.05.

4.05 Reference Points

A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment is necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel. 4.06 Hazardous Environmental Condition at Site A. Reports and Drawings: The Supplementary Conditions identify those reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at the Site.

B. Limited Reliance by Contractor on Technical Data Authorized: Contractor may rely upon the accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the

Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or 2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or

3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions or information.

C. Contractor shall not be responsible for any
Hazardous Environmental Condition uncovered or
revealed at the Site which was not shown or indicated in
Drawings or Specifications or identified in the Contract
Documents to be within the scope of the Work.
Contractor shall be responsible for a Hazardous
Environmental Condition created with any materials
brought to the Site by Contractor, Subcontractors,
Suppliers, or anyone else for whom Contractor is
responsible.

D. If Contractor encounters a Hazardous Environmental Condition or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, Contractor shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 6.16.A); and (iii) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 4.06.E. E. Contractor shall not be required to resume Work in connection with such condition or in any affected area until after Owner has obtained any required permits related thereto and delivered written notice to Contractor: (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work; or (ii) specifying any special conditions under which such Work may be resumed safely. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, either party may make a Claim therefor as provided in Paragraph 10.05.

F. If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of an adjustment in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a Claim therefor as provided in Paragraph 10.05. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 7.

G. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition: (i) was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be included within the scope of the Work, and (ii) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06.G shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

H. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06.H shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

I. The provisions of Paragraphs 4.02, 4.03, and 4.04 do not apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 5 – BONDS AND INSURANCE

5.01 *Performance, Payment, and Other Bonds*A. Contractor shall furnish performance and payment bonds, each in an amount at least equal to the

Contract Price as security for the faithful performance and payment of all of Contractor's obligations under the Contract Documents. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 13.07, whichever is later, except as provided otherwise by Laws or Regulations or by the Contract Documents. Contractor shall also furnish such other bonds as are required by the Contract Documents. B. All bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All bonds signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority shall show that it is effective on the date the agent or attorney-in-fact signed each bond. C. If the surety on any bond furnished by Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of Paragraph 5.01.B, Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification. provide another bond and surety, both of which shall comply with the requirements of Paragraphs 5.01.B and 5.02.

5.02 Licensed Sureties and Insurers

A. All bonds and insurance required by the Contract Documents to be purchased and maintained by Owner or Contractor shall be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in the Supplementary Conditions. 5.03 *Certificates of Insurance*

A. Contractor shall deliver to Owner, with copies to each additional insured and loss payee identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Owner or any other additional insured) which Contractor is required to purchase and maintain.

B. Owner shall deliver to Contractor, with copies to each additional insured and loss payee identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Contractor or any other additional insured) which Owner is required to purchase and maintain.

C. Failure of Owner to demand such certificates

or other evidence of Contractor's full compliance with these insurance requirements or failure of Owner to identify a deficiency in compliance from the evidence provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.

D. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor.

E. The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner in the Contract Documents.

5.04 Contractor's Insurance

A. Contractor shall purchase and maintain such insurance as is appropriate for the Work being performed and as will provide protection from claims set forth below which may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable:

- 1. claims under workers' compensation, disability benefits, and other similar employee benefit acts:
- 2. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees:
- 3. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees;
- 4. claims for damages insured by reasonably available personal injury liability coverage which are sustained:
- a. by any person as a result of an offense directly or indirectly related to the employment of such person by Contractor, or b. by any other person for any other reason;
- 5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and
- 6. claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.
- B. The policies of insurance required by this Paragraph 5.04 shall:
- 1. with respect to insurance required by Paragraphs 5.04.A.3 through 5.04.A.6 inclusive, be written on an occurrence basis, include as additional insureds (subject to any customary exclusion regarding professional liability) Owner and Engineer, and any other individuals or entities identified in the Supplementary Conditions, all of whom shall be listed as additional insureds, and include coverage for the respective officers,

directors, members, partners, employees, agents, consultants, and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;

- 2. include at least the specific coverages and be written for not less than the limits of liability provided in the Supplementary Conditions or required by Laws or Regulations, whichever is greater;
- 3. include contractual liability insurance covering Contractor's indemnity obligations under Paragraphs 6.11 and 6.20;
- 4. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured identified in the Supplementary Conditions to whom a certificate of insurance has been issued (and the certificates of insurance furnished by the Contractor pursuant to Paragraph 5.03 will so provide);
- 5. remain in effect at least until final payment and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work in accordance with Paragraph 13.07; and
- 6. include completed operations coverage:
- a. Such insurance shall remain in effect for two years after final payment.
- b. Contractor shall furnish Owner and each other additional insured identified in the Supplementary Conditions, to whom a certificate of insurance has been issued, evidence satisfactory to Owner and any such additional insured of continuation of such insurance at final payment and one year thereafter.
- 5.05 Owner's Liability Insurance

A. In addition to the insurance required to be provided by Contractor under Paragraph 5.04, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.

5.06 Property Insurance

A. Unless otherwise provided in the Supplementary Conditions, Owner shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:

1. include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as a loss payee;

2. be written on a Builder's Risk "all-risk" policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage (other than that caused by flood), and such other perils or causes of loss as may be specifically required by the Supplementary Conditions.

- 3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);
 4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by Owner prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by Engineer;
 5. allow for partial utilization of the Work by Owner:
- 6. include testing and startup; and
- 7. be maintained in effect until final payment is made unless otherwise agreed to in writing by Owner, Contractor, and Engineer with 30 days written notice to each other loss payee to whom a certificate of insurance has been issued.
- B. Owner shall purchase and maintain such equipment breakdown insurance or additional property insurance as may be required by the Supplementary Conditions or Laws and Regulations which will include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as a loss payee.
- C. All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with this Paragraph 5.06 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other loss payee to whom a certificate of insurance has been issued and will contain waiver provisions in accordance with Paragraph 5.07.
- D. Owner shall not be responsible for purchasing and maintaining any property insurance specified in this Paragraph 5.06 to protect the interests of Contractor, Subcontractors, or others in the Work to the extent of any

deductible amounts that are identified in the Supplementary Conditions. The risk of loss within such identified deductible amount will be borne by Contractor, Subcontractors, or others suffering any such loss, and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense. E. If Contractor requests in writing that other special insurance be included in the property insurance policies provided under this Paragraph 5.06, Owner shall, if possible, include such insurance, and the cost thereof will be charged to Contractor by appropriate Change Order. Prior to commencement of the Work at the Site, Owner shall in writing advise Contractor whether or not such other insurance has been procured by Owner. 5.07 Waiver of Rights

A. Owner and Contractor intend that all policies purchased in accordance with Paragraph 5.06 will protect Owner, Contractor, Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions as loss payees (and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or loss pavees thereunder. Owner and Contractor waive all rights against each other and their respective officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Subcontractors and Engineer, and all other individuals or entities identified in the Supplementary Conditions as loss payees (and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them) under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner as trustee or otherwise payable under any policy so issued.

B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them for:

1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and

2. loss or damage to the completed Project or

part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial utilization pursuant to Paragraph 14.05, after Substantial Completion pursuant to Paragraph 14.04, or after final payment pursuant to Paragraph 14.07.

C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 5.07.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them.

5.08 Receipt and Application of Insurance Proceeds A. Any insured loss under the policies of insurance required by Paragraph 5.06 will be adjusted with Owner and made payable to Owner as fiduciary for the loss payees, as their interests may appear, subject to the requirements of any applicable mortgage clause and of Paragraph 5.08.B. Owner shall deposit in a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof, and the Work and the cost thereof covered by an appropriate Change Order. B. Owner as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within 15 days after the occurrence of loss to Owner's exercise of this power. If such objection be made, Owner as fiduciary shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, Owner as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, Owner as fiduciary shall give bond for the proper performance of such duties.

5.09 Acceptance of Bonds and Insurance; Option to Replace

A. If either Owner or Contractor has any objection to the coverage afforded by or other provisions of the bonds or insurance required to be purchased and maintained by the other party in accordance with Article 5 on the basis of non-conformance with the Contract Documents, the objecting party shall so notify the other party in writing within 10 days after receipt of the certificates (or other evidence requested) required by Paragraph 2.01.B. Owner and Contractor shall each provide to the other such additional information in respect of insurance provided as the other may reasonably request. If either party does not purchase or maintain all of the bonds and insurance required of such party by the

Contract Documents, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage. Without prejudice to any other right or remedy, the other party may elect to obtain equivalent bonds or insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and a Change Order shall be issued to adjust the Contract Price accordingly. 5.10 Partial Utilization, Acknowledgment of Property Insurer

A. If Owner finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 14.05, no such use or occupancy shall commence before the insurers providing the property insurance pursuant to Paragraph 5.06 have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy.

ARTICLE 6 – CONTRACTOR'S RESPONSIBILITIES

6.01 Supervision and Superintendence

A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction. Contractor shall not be responsible for the negligence of Owner or Engineer in the design or specification of a specific means, method, technique, sequence, or procedure of construction which is shown or indicated in and expressly required by the Contract Documents.

B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.

6.02 Labor; Working Hours

A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.

B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours. Contractor will not permit the performance of Work on a Saturday,

Sunday, or any legal holiday without Owner's written consent (which will not be unreasonably withheld) given after prior written notice to Engineer.

6.03 Services, Materials, and Equipment

A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work.

B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.

C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

6.04 Progress Schedule

A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.07 as it may be adjusted from time to time as provided below.

- 1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.07) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times. Such adjustments will comply with any provisions of the General Requirements applicable thereto.
- 2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 12. Adjustments in Contract Times may only be made by a Change Order.

6.05 Substitutes and "Or-Equals"

A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or-equal" item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be submitted to Engineer for review under the circumstances described below.

1. "Or-Equal" Items: If in Engineer's sole

discretion an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by Engineer as an "or equal" item, in which case review and approval of the proposed item may, in Engineer's sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. For the purposes of this Paragraph 6.05.A.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:

a. in the exercise of reasonable judgment Engineer determines that:

- 1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
- 2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole; and
- 3) it has a proven record of performance and availability of responsive service
- b. Contractor certifies that, if approved and incorporated into the Work:
- 1) there will be no increase in cost to the Owner or increase in Contract Times; and
- 2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.
- 2. Substitute Items:
- a. If in Engineer's sole discretion an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item under Paragraph 6.05.A.1, it will be considered a proposed substitute item.
- b. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. Requests for review of proposed substitute items of material or equipment will not be accepted by Engineer from anyone other than Contractor.
- c. The requirements for review by Engineer will be as set forth in Paragraph 6.05.A.2.d, as supplemented by the General Requirements, and as Engineer may decide is appropriate under the circumstances.
- d. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:
- 1) shall certify that the proposed substitute item will: a) perform adequately the functions and achieve the results called for by the general design,
- b) be similar in substance to that specified, and
- c) be suited to the same use as that specified;

- 2) will state:
- a) the extent, if any, to which the use of the proposed substitute item will prejudice Contractor's achievement of Substantial Completion on time, b) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item, and
- c) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty;
- 3) will identify:
- a) all variations of the proposed substitute item from that specified, and
- b) available engineering, sales, maintenance, repair, and replacement services; and
- 4) shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change.
- B. Substitute Construction Methods or Procedures: If a specific means, method, technique, sequence, or procedure of construction is expressly required by the Contract Documents, Contractor may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by Engineer. Contractor shall submit sufficient information to allow Engineer, in Engineer's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The requirements for review by Engineer will be similar to those provided in Paragraph 6.05.A.2.
- C. Engineer's Evaluation: Engineer will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to Paragraphs 6.05.A and 6.05.B. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No "or equal" or substitute will be ordered, installed or utilized until Engineer's review is complete, which will be evidenced by a Change Order in the case of a substitute and an approved Shop Drawing for an "or equal." Engineer will advise Contractor in writing of any negative determination.
- D. Special Guarantee: Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute. E. Engineer's Cost Reimbursement: Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor pursuant to Paragraphs 6.05.A.2 and 6.05.B. Whether or not Engineer

approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.

F. *Contractor's Expense*: Contractor shall provide all data in support of any proposed substitute or "or-equal" at Contractor's expense.

6.06 Concerning Subcontractors, Suppliers, and Others

A. Contractor shall not employ any Subcontractor, Supplier, or other individual or entity (including those acceptable to Owner as indicated in Paragraph 6.06.B), whether initially or as a replacement, against whom Owner may have reasonable objection. Contractor shall not be required to employ any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom Contractor has reasonable objection.

B. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, or other individuals or entities to be submitted to Owner in advance for acceptance by Owner by a specified date prior to the Effective Date of the Agreement, and if Contractor has submitted a list thereof in accordance with the Supplementary Conditions, Owner's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the Bidding Documents or the Contract Documents) of any such Subcontractor, Supplier, or other individual or entity so identified may be revoked on the basis of reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity, and the Contract Price will be adjusted by the difference in the cost occasioned by such replacement, and an appropriate Change Order will be issued. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of any right of Owner or Engineer to reject defective Work.

C. Contractor shall be fully responsible to
Owner and Engineer for all acts and omissions of the
Subcontractors, Suppliers, and other individuals or
entities performing or furnishing any of the Work just as
Contractor is responsible for Contractor's own acts and
omissions. Nothing in the Contract Documents:
1. shall create for the benefit of any such Subcontractor,
Supplier, or other individual or entity any contractual
relationship between Owner or Engineer and any such
Subcontractor, Supplier or other individual or entity; nor
2. shall create any obligation on the part of Owner or
Engineer to pay or to see to the payment of any

moneys due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.

D. Contractor shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with Contractor.

E. Contractor shall require all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work to communicate with Engineer through Contractor.

F. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.

G. All Work performed for Contractor by a Subcontractor or Supplier will be pursuant to an appropriate agreement between Contractor and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer. Whenever any such agreement is with a Subcontractor or Supplier who is listed as a loss payee on the property insurance provided in Paragraph 5.06, the agreement between the Contractor and the Subcontractor or Supplier will contain provisions whereby the Subcontractor or Supplier waives all rights against Owner, Contractor, Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or loss payees (and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them) for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work. If the insurers on any such policies require separate waiver forms to be signed by any Subcontractor or Supplier, Contractor will obtain the same.

6.07 Patent Fees and Royalties

A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents.

B. To the fullest extent permitted by Laws and

Regulations, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.

C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

A. Unless otherwise provided in the Supplementary Conditions, Contractor shall obtain and pay for all construction permits and licenses. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of opening of Bids, or, if there are no Bids, on the Effective Date of the Agreement. Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

6.09 Laws and Regulations

A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.

B. If Contractor performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work.

However, it shall not be Contractor's responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.

C. Changes in Laws or Regulations not known at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids) having an effect on the cost or time of performance of the Work shall be the subject of an adjustment in Contract Price or Contract Times. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

6.10 *Taxes*

A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

6.11 Use of Site and Other Areas

A. Limitation on Use of Site and Other Areas:

- 1. Contractor shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Laws and Regulations and shall not unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or of any adjacent land or areas resulting from the performance of the Work.
- 2. Should any claim be made by any such owner or occupant because of the performance of the Work, Contractor shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law.
- 3. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused by or based upon Contractor's performance of the Work.
- B. Removal of Debris During Performance of the Work: During the progress of the Work Contractor shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials,

rubbish, and other debris shall conform to applicable Laws and Regulations.

C. Cleaning: Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

D. Loading Structures: Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent property to stresses or pressures that will endanger it. 6.12 Record Documents

A. Contractor shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, and written interpretations and clarifications in good order and annotated to show changes made during construction. These record documents together with all approved Samples and a counterpart of all approved Shop Drawings will be available to Engineer for reference. Upon completion of the Work, these record documents, Samples, and Shop Drawings will be delivered to Engineer for Owner.

6.13 Safety and Protection

A. Contractor shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

- 1. all persons on the Site or who may be affected by the Work:
- 2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
- 3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall

cooperate with them in the protection, removal, relocation, and replacement of their property. C. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. The Supplementary Conditions identify any Owner's safety programs that are applicable to the Work. D. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site. E. All damage, injury, or loss to any property referred to in Paragraph 6.13.A.2 or 6.13.A.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them). F. Contractor's duties and responsibilities for safety and for protection of the Work shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 14.07.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.14 Safety Representative

A. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

6.15 Hazard Communication Programs

A. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

6.16 Emergencies

A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in

response to such an emergency, a Work Change Directive or Change Order will be issued.

6.17 Shop Drawings and Samples

A. Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals (as required by Paragraph 2.07). Each submittal will be identified as Engineer may require.

- 1. Shop Drawings:
- a. Submit number of copies specified in the General Requirements.
- b. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide and to enable Engineer to review the information for the limited purposes required

by Paragraph 6.17.D.

- 2. Samples:
- a. Submit number of Samples specified in the Specifications.
- b. Clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 6.17.D.
- B. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.

C. Submittal Procedures:

- 1. Before submitting each Shop Drawing or Sample, Contractor shall have:
- a. reviewed and coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents:
- b. determined and verified all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto; c. determined and verified the suitability of all materials offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
- d. determined and verified all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto.

 2. Each submittal shall bear a stamp or specification.
- 2. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied

- Contractor's obligations under the Contract Documents with respect to Contractor's review and approval of that submittal.
- 3. With each submittal, Contractor shall give Engineer specific written notice of any variations that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be both a written communication separate from the Shop Drawings or Sample submittal; and, in addition, by a specific notation made on each Shop Drawing or Sample submitted to Engineer for review and approval of each such variation.
- D. Engineer's Review:
- 1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
- 2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
- 3. Engineer's review and approval shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 6.17.C.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer's review and approval shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 6.17.C.1. E. Resubmittal Procedures:
- 1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals. 6.18 *Continuing the Work*A. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by Paragraph 15.04 or as Owner and Contractor may otherwise agree in writing.

- 6.19 Contractor's General Warranty and Guarantee A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its officers, directors, members, partners, employees, agents, consultants, and subcontractors shall be entitled to rely on representation of Contractor's warranty and guarantee. B. Contractor's warranty and guarantee hereunder
- excludes defects or damage caused by:
- 1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
- 2. normal wear and tear under normal usage.
- C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the **Contract Documents:**
- 1. observations by Engineer;
- 2. recommendation by Engineer or payment by Owner of any progress or final payment;
- 3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
- 4. use or occupancy of the Work or any part thereof by Owner:
- 5. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by Engineer;
- 6. any inspection, test, or approval by others; or 7. any correction of defective Work by Owner. 6.20 Indemnification
- A. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable.
- B. In any and all claims against Owner or Engineer or any of their officers, directors, members,

- partners, employees, agents, consultants, or subcontractors by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 6.20.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts. C. The indemnification obligations of Contractor under Paragraph 6.20.A shall not extend to the liability of
- Engineer and Engineer's officers, directors, members, partners, employees, agents, consultants and subcontractors arising out of:
- 1. the preparation or approval of, or the failure to prepare or approve maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or 2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or
- 6.21 Delegation of Professional Design Services A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable law.
- B. If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.
- C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.
- D. Pursuant to this Paragraph 6.21, Engineer's review and approval of design calculations and design

drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 6.17.D.1.

E. Contractor shall not be responsible for the adequacy of the performance or design criteria required by the Contract Documents.

End of Article 6

ARTICLE 7 – OTHER WORK AT THE SITE

7.01 Related Work at Site

A. Owner may perform other work related to the Project at the Site with Owner's employees, or through other direct contracts therefor, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then:

- 1. written notice thereof will be given to Contractor prior to starting any such other work; and
- 2. if Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times that should be allowed as a result of such other work, a Claim may be made therefor as provided in Paragraph 10.05.
- B. Contractor shall afford each other contractor who is a party to such a direct contract, each utility owner, and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work, and properly coordinate the Work with theirs. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected. The duties and responsibilities of Contractor under this Paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of Contractor in said direct contracts between Owner and such utility owners another contractor.
- C. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 7, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such

other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

7.02 Coordination

- A. If Owner intends to contract with others for the performance of other work on the Project at the Site, the following will be set forth in Supplementary Conditions:
- 1. the individual or entity who will have authority and responsibility for coordination of the activities among the various contractors will be identified;
- 2. the specific matters to be covered by such authority and responsibility will be itemized; and
- 3. the extent of such authority and responsibilities will be provided.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

7.03 Legal Relationships

- A. Paragraphs 7.01.A and 7.02 are not applicable for utilities not under the control of Owner.
- B. Each other direct contract of Owner under Paragraph 7.01.A shall provide that the other contractor is liable to Owner and Contractor for the reasonable direct delay and disruption costs incurred by Contractor as a result of the other contractor's wrongful actions or inactions.
- C. Contractor shall be liable to Owner and any other contractor under direct contract to Owner for the reasonable direct delay and disruption costs incurred by such other contractor as a result of Contractor's wrongful action or inactions.

ARTICLE 8 – OWNER'S RESPONSIBILITIES

8.01 Communications to Contractor

A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

8.02 Replacement of Engineer

A. In case of termination of the employment of Engineer, Owner shall appoint an engineer to whom Contractor makes no reasonable objection, whose status under the Contract Documents shall be that of the former Engineer.

8.03 Furnish Data

A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

8.04 Pay When Due

A. Owner shall make payments to Contractor when they are due as provided in Paragraphs 14.02.C and 14.07.C.

8.05 Lands and Easements; Reports and Tests
A. Owner's duties with respect to providing
lands and easements and providing engineering surveys to
establish reference points are set forth in Paragraphs 4.01
and 4.05. Paragraph 4.02 refers to Owner's identifying
and making available to Contractor copies of reports of
explorations and tests of subsurface conditions and

drawings of physical conditions relating to existing surface or subsurface structures at the Site.

8.06 Insurance

A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 5.

8.07 Change Orders

A. Owner is obligated to execute Change Orders as indicated in Paragraph 10.03.

8.08 Inspections, Tests, and Approvals

A. Owner's responsibility with respect to certain inspections, tests, and approvals are set forth in Paragraph 13.03.B.

8.09 Limitations on Owner's Responsibilities

A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for,
Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

8.10 *Undisclosed Hazardous Environmental Condition* A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 4.06.

8.11 Evidence of Financial Arrangements
A. Upon request of Contractor, Owner shall furnish
Contractor reasonable evidence that financial
arrangements have been made to satisfy Owner's
obligations under the Contract Documents.
8.12 Compliance with Safety Program
A. While at the Site, Owner's employees and
representatives shall comply with the specific applicable
requirements of Contractor's safety programs of which

Owner has been informed pursuant to Paragraph 6.13.D.

ARTICLE 9 – ENGINEER'S STATUS DURING CONSTRUCTION

9.01 Owner's Representative

A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineers Owner's representative during construction are set forth in the Contract Documents.

9.02 Visits to Site

A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the

Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work. B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 9.09. Particularly, but without limitation, during or as a result of Engineer's visitor observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. 9.03 Project Representative

A. If Owner and Engineer agree, Engineer will furnish a Resident Project Representative to assist Engineering providing more extensive observation of the Work. The authority and responsibilities of any such Resident Project Representative and assistants will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph

9.09. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

9.04 Authorized Variations in Work

A. Engineer may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. These may be accomplished by a Field Order and will be binding on Owner and also on Contractor, who shall perform the Work involved promptly. If Owner or Contractor believes that afield Order justifies an adjustment in the Contract Price or Contract Times, or both, and the parties are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

9.05 Rejecting Defective Work

A. Engineer will have authority to reject Work which Engineer believes to be defective, or that Engineer believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice

the integrity of the design concept of the completed Projects a functioning whole as indicated by the Contract Documents. Engineer will also have authority to require special inspection or testing of the Work as provided in Paragraph 13.04, whether or not the Work is fabricated, installed, or completed.

9.06 Shop Drawings, Change Orders and Payments A. In connection with Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, see Paragraph 6.17.

B. In connection with Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, see Paragraph 6.21. C. In connection with Engineer's authority as to Change Orders see Articles 10, 11, and 12. D. In connection with Engineer's authority as to Applications for Payment see Article 14. 9.07 Determinations for Unit Price Work A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of Paragraph 10.05.

9.08 Decisions on Requirements of Contract
Documents and Acceptability of Work
A. Engineer will be the initial interpreter of the
requirements of the Contract Documents and judge of the
acceptability of the Work thereunder. All matters in
question and other matters between Owner and Contractor
arising prior to the date final payment is due relating to
the acceptability of the Work, and the interpretation of the
requirements of the Contract Documents pertaining to the
performance of the Work, will be referred initially to
Engineer in writing within 30 days of the event giving rise
to the question.

B. Engineer will, with reasonable promptness, render a written decision on the issue referred. If Owner or Contractor believes that any such decision entitles them to an adjustment in the Contract Price or Contract Times or both, a Claim may be made under Paragraph 10.05. The date of Engineer's decision shall be the date of the event giving rise to the issues referenced for the purposes of Paragraph 10.05.B.

C. Engineer's written decision on the issue referred will be final and binding on Owner and Contractor, subject to the provisions of Paragraph 10.05. D. When functioning as interpreter and judge under this Paragraph 9.08, Engineer will not show partiality to Owner or Contractor and will not be liable in

connection with any interpretation or decision rendered in good faith in such capacity.

9.09 Limitations on Engineer's Authority and Responsibilities

A. Neither Engineer's authority or responsibility under this Article 9 or under any other provision of the Contract Documents nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.

D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 14.07.A will only be to determine generally, that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals that the results certified indicate compliance with, the Contract Documents. E. The limitations upon authority and responsibility set forth in this Paragraph 9.09 shall also apply to the Resident Project Representative, if any, and assistants, if any.

9.10 Compliance with Safety Program
A. While at the Site, Engineer's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Engineer has been informed pursuant to Paragraph 6.13.D.

ARTICLE 10 – CHANGES IN THE WORK; CLAIMS

10.01 *Authorized Changes in the Work*A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work by a Change Order, or a Work Change Directive.

Upon receipt of any such document, Contractor shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided). B. If Owner and Contractor are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a Work Change Directive, a Claim may be made therefor as provided in Paragraph 10.05.

10.02 Unauthorized Changes in the Work
A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents as amended, modified, or supplemented as provided in Paragraph 3.04, except in the case of an emergency as provided in Paragraph 6.16 or in the case of uncovering Work as provided in Paragraph 13.04.D.

10.03 Execution of Change Orders

A. Owner and Contractor shall execute appropriate Change Orders recommended by Engineer covering:

1. changes in the Work which are: (i) ordered by Owner pursuant to Paragraph 10.01.A, (ii) required because of acceptance of defective Work under Paragraph 13.08.A

or Owner's correction of defective Work under Paragraph 13.09, or (iii) agreed to by the parties:

- 2. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive; and
- 3. changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by Engineer pursuant to Paragraph 10.05; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, Contractor shall carry on the Work and adhere to the Progress Schedule as provided in Paragraph 6.18.A.

10.04 Notification to Surety

A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

10.05 *Claims*

A. *Engineer's Decision Required*: All Claims, except those waived pursuant to Paragraph 14.09, shall be

referred to the Engineer for decision. A decision by Engineer shall be required as a condition precedent to any exercise by Owner or Contractor of any rights or remedies either may otherwise have under the Contract Documents or by Laws and Regulations in respect of such Claims. B. Notice: Written notice stating the general nature of each Claim shall be delivered by the claimant to Engineer and the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto. The responsibility to substantiate a Claim shall rest with the party making the Claim. Notice of the amount or extent of the Claim, with supporting data shall be delivered to the Engineer and the other party to the Contract within 60 days after the start of such event (unless Engineer allows additional time for claimant to submit additional or more accurate data in support of such

A Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of Paragraph 12.01.B. A Claim for an adjustment in Contract Times shall be prepared in accordance with the provisions of Paragraph 12.02.B. Each Claim shall be accompanied by claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of said event. The opposing party shall submit any response to Engineer and the claimant within 30 days after receipt of the claimant's last submittal (unless Engineer allows additional time). C. Engineer's Action: Engineer will review each Claim and, within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any, take one of the following actions in writing:

- 1. deny the Claim in whole or in part;
- 2. approve the Claim; or
- 3. notify the parties that the Engineer is unable to resolve the Claim if, in the Engineer's sole discretion, it would be inappropriate for the Engineer to do so. For purposes of further resolution of the Claim, such notice shall be deemed a denial.
- D. In the event that Engineer does not take action on a Claim within said 30 days, the Claim shall be deemed denied.
- E. Engineer's written action under Paragraph 10.05.C or denial pursuant to Paragraphs 10.05.C.3 or 10.05.D will be final and binding upon Owner and Contractor, unless Owner or Contractor invoke the dispute resolution procedure set forth in Article 16 within 30 days of such action or denial.
- F. No Claim for an adjustment in Contract Price or Contract Times will be valid if not submitted in accordance with this Paragraph 10.05.

ARTICLE 11 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK 11.01 Cost of the Work

- A. Costs Included: The term Cost of the Work means the sum of all costs, except those excluded in Paragraph 11.01.B, necessarily incurred and paid by Contractor in the proper performance of the Work. When the value of any Work covered by a Change Order or when Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to Contractor will be only those additional or incremental costs required because of the change in the Work or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by Owner, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall not include any of the costs itemized in Paragraph 11.01.B, and shall include only the following items:
- 1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.
- 2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.
- 3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 11.01.
- 4. Costs of special consultants (including but not

- limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.
- 5. Supplemental costs including the following:
- a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
- b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
- c. Rentals of all construction equipment and machinery, and the parts thereof whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.
- d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
- e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
- f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 5.06.D), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.
- g. The cost of utilities, fuel, and sanitary facilities at the Site.
- h. Minor expenses such as telegrams, long distance telephone calls, telephone service at the Site, express and courier services, and similar petty cash items in connection with the Work.
- i. The costs of premiums for all bonds and insurance Contractor is required by the Contract Documents to purchase and maintain.

- B. *Costs Excluded:* The term Cost of the Work shall not include any of the following items:
- 1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expediters, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 11.01.A.1 or specifically covered by Paragraph 11.01.A.4, all of which are to be considered administrative costs covered by the Contractor's fee.
- 2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
- 3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
- 4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
- 5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraphs 11.01.A.
- C. Contractor's Fee: When all the Work is performed on the basis of cost-plus, Contractor's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 12.01.C.
- D. *Documentation:* Whenever the Cost of the Work for any purpose is to be determined pursuant to Paragraphs 11.01.A and 11.01.B, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

11.02 Allowances

A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.

- B. Cash Allowances:
- 1. Contractor agrees that:
- a. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and

- b. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.
- C. Contingency Allowance:
- 1. Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.
- 11.03 Unit Price Work
- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by Contractor will be made by Engineer subject to the provisions of Paragraph 9.07.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. Owner or Contractor may make a Claim for an adjustment in the Contract Price in accordance with Paragraph 10.05 if:
- 1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and
- 2. there is no corresponding adjustment with respect to any other item of Work; and
- 3. Contractor believes that Contractor is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 12 – CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES

12.01 Change of Contract Price

A. The Contract Price may only be changed by a Change Order. Any Claim for an adjustment in the Contract

Price shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.

- B. The value of any Work covered by a Change Order or of any Claim for an adjustment in the Contract Price will be determined as follows:
- 1. where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 11.03); or
- 2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 12.01.C.2); or
- 3. where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under Paragraph 12.01.B.2, on the basis of the Cost of the Work (determined as provided in Paragraph 11.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 12.01.C).
- C. *Contractor's Fee:* The Contractor's fee for overhead and profit shall be determined as follows:
- 1. a mutually acceptable fixed fee; or
- 2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
- a. for costs incurred under Paragraphs 11.01.A.1 and 11.01.A.2, the Contractor's fee shall be 15 percent; b. for costs incurred under Paragraph 11.01.A.3, the contractor's fee shall be five percent;
- c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 12.01.C.2.a and 12.01.C.2.b is that the Subcontractor who actually performs the Work, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such Subcontractor under Paragraphs 11.01.A.1and 11.01.A.2 and that any higher tier Subcontractor and Contractor will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;
- d. no fee shall be payable on the basis of costs itemized under Paragraphs 11.01.A.4, 11.01.A.5, and 11.01.B;
- e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the

basis of the net change in accordance with Paragraphs 12.01.C.2.a through 12.01.C.2.e, inclusive.

12.02 Change of Contract Times

- A. The Contract Times may only be changed by a Change Order. Any Claim for an adjustment in the Contract Times shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.
- B. Any adjustment of the Contract Times covered by a Change Order or any Claim for an adjustment in the Contract Times will be determined in accordance with the provisions of this Article 12. 12.03 *Delays*
- A. Where Contractor is prevented from completing any part of the Work within the Contract Times due to delay beyond the control of Contractor, the Contract Times will be extended in an amount equal to the time lost due to such delay if a Claim is made therefor as provided in Paragraph 12.02.A. Delays beyond the control of Contractor shall include, but not be limited to, acts or neglect by Owner, acts or neglect of utility owners or other contractors performing other work as contemplated by
- Article 7, fires, floods, epidemics, abnormal weather conditions, or acts of God.
- B. If Owner, Engineer, or other contractors or utility owners performing other work for Owner as contemplated by Article 7, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times, or both. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- C. If Contractor is delayed in the performance or progress of the Work by fire, flood, epidemic, abnormal weather conditions, acts of God, acts or failures to act of utility owners not under the control of Owner, or other causes not the fault of and beyond control of Owner and Contractor, then Contractor shall be entitled to an equitable adjustment in Contract Times, if such adjustment is essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays described in this Paragraph 12.03.C.
- D. Owner, Engineer, and their officers, directors, members, partners, employees, agents, consultants, or subcontractors shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by

Contractor on or in connection with any other project or anticipated project.

E. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delays within the control of Contractor. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Contractor.

ARTICLE 13 – TESTS AND INSPECTIONS: CORRECTION, REMOVAL OR ACCEPTANCE OF **DEFECTIVE WORK**

13.01 Notice of Defects

A. Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor. Defective Work may be rejected, corrected, or accepted as provided in this Article 13.

13.02 Access to Work

A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and governmental agencies with jurisdictional interests will have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply therewith as applicable.

13.03 Tests and Inspections

A. Contractor shall give Engineer timely notice of readiness of the Work for all required inspections. tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.

- B. Owner shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except:
- 1. for inspections, tests, or approvals covered by Paragraphs 13.03.C and 13.03.D below;
- 2. that costs incurred in connection with tests or inspections conducted pursuant to Paragraph 13.04.B shall be paid as provided in Paragraph 13.04.C; and 3. as otherwise specifically provided in the
- Contract Documents. C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically, to be inspected, tested, or approved by an employee or other representative of such public body,

Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.

D. Contractor shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work; or acceptance of materials, mix

designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to Owner and Engineer.

E. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation.

F. Uncovering Work as provided in Paragraph 13.03.E shall be at Contractor's expense unless

has given Engineer timely notice of Contractor's intention to cover the same and Engineer has not acted with reasonable promptness in response to such notice. 13.04 Uncovering Work

A. If any Work is covered contrary to the written request of Engineer, it must, if requested by Engineer, be uncovered for Engineer's observation and replaced at Contractor's expense.

B. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, furnishing all necessary labor, material, and equipment.

C. If it is found that the uncovered Work is defective, Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05.

D. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.

13.05 Owner May Stop the Work

A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract

Documents, Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

13.06 Correction or Removal of Defective Work

A. Promptly after receipt of written notice,
Contractor shall correct all defective Work, whether or
not fabricated, installed, or completed, or, if the Work has
been rejected by Engineer, remove it from the Project and
replace it with Work that is not defective. Contractor shall
pay all claims, costs, losses, and damages (including but
not limited to all fees and charges of engineers, architects,
attorneys, and other professionals and all court or
arbitration or other dispute resolution costs) arising out of
or relating to such correction or removal (including but
not limited to all costs of repair or replacement of work of

B. When correcting defective Work under the terms of this Paragraph 13.06 or Paragraph 13.07, Contractor shall take no action that would void or otherwise

impair Owner's special warranty and guarantee, if any, on said Work.

13.07 Correction Period

others).

A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents) or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for Contractor's use by Owner or permitted by Laws and Regulations as contemplated in Paragraph 6.11.A is found to be defective, Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:

- 1. repair such defective land or areas; or
- 2. correct such defective Work; or
- 3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
- 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom.
- B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals

and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by Contractor.

C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.

D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this Paragraph 13.07, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

E. Contractor's obligations under this Paragraph 13.07 are in addition to any other obligation or warranty. The provisions of this Paragraph 13.07 shall not be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

13.08 Acceptance of Defective Work

A. If, instead of requiring correction or removal and replacement of defective Work, Owner (and, prior to Engineer's recommendation of final payment, Engineer) prefers to accept it, Owner may do so. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects. attorneys, and other professionals and all court or arbitration or other dispute resolution costs) attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness) and for the diminished value of the Work to the extent not otherwise paid by Contractor pursuant to this sentence. If any such acceptance occurs prior to Engineer's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and Owner shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work so accepted. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05. If the acceptance occurs after such recommendation, an appropriate amount will be paid by Contractor to Owner.

13.09 Owner May Correct Defective Work

A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace rejected Work as required by Engineer in accordance with Paragraph 13.06.A, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, Owner may, after seven days written notice to Contractor, correct, or remedy any such deficiency.

B. In exercising the rights and remedies under this Paragraph 13.09, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, take possession of Contractor's tools, appliances, construction equipment and machinery at the Site, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this Paragraph.

C. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 13.09 will be charged against Contractor, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount of the adjustment, Owner may make a Claim therefor as provided in Paragraph 10.05. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.

D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 13.09.

ARTICLE 14 – PAYMENTS TO CONTRACTOR AND COMPLETION

14.01 Schedule of Values

A. The Schedule of Values established as provided in Paragraph 2.07.A will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed.

14.02 Progress Payments

A. Applications for Payments:

1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract

Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.

- 2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
- 3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement. B. *Review of Applications:*
- 1. Engineer will, within 10 days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application towner or return the Application to Contractor indicating inwriting Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
- 2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief: a. the Work has progressed to the point indicated;
- b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 9.07, and any other qualifications stated in the recommendation); and
- c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
- 3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
- a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract Documents; or
- b. there may not be other matters or issues

between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.

- 4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer: a. to supervise, direct, or control the Work, or
- b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or
- c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or
- d. to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, or
- e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
- 5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 14.02.B.2. Engineer may also refuse to recommend any such payment or, because of subsequently discovered evidence or the results of subsequent inspections or tests, revise or revoke any such payment recommendation previously made, to such extent as may be necessary in Engineer's opinion to protect Owner from loss because:
- a. the Work is defective, or completed Work has been damaged, requiring correction or replacement;
- b. the Contract Price has been reduced by Change Orders;
- c. Owner has been required to correct defective Work or complete Work in accordance with Paragraph 13.09; or d. Engineer has actual knowledge of the occurrence of any of the events enumerated in Paragraph 15.02.A.
- C. Payment Becomes Due:
- 1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended will (subject to the provisions of Paragraph 14.02.D) become due, and when due will be paid by Owner to Contractor.
- D. Reduction in Payment:
- 1. Owner may refuse to make payment of the full amount recommended by Engineer because:
- a. claims have been made against Owner on account of Contractor's performance or furnishing of the Work; b. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;
- c. there are other items entitling Owner to a set-off against the amount recommended; or

- d. Owner has actual knowledge of the occurrence of any of the events enumerated in Paragraphs 14.02.B.5.a through 14.02.B.5.c or Paragraph 15.02.A.
- 2. If Owner refuses to make payment of the full amount recommended by Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, when Contractor remedies the reasons for such action.
- 3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 14.02.C.1 and subject to interest as provided in the Agreement.
- 14.03 Contractor's Warranty of Title
- A. Contractor warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to Owner no later than the time of payment free and clear of all Liens.
- 14.04 Substantial Completion
- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete (except for items specifically listed by Contractor as incomplete) and request that Engineer issue a certificate of Substantial Completion.
- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a tentative certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the tentative certificate during which to make written objection to Engineer as to any provisions of the certificate or attached list. If, after considering such objections, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the tentative certificate to Owner, notify Contractor in writing, stating the reasons therefor. If, after consideration of Owner's objections, Engineer considers the Work substantially complete, Engineer will, within said 14 days, execute and deliver to Owner and Contractor a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the

consideration of any objections from Owner.

D. At the time of delivery of the tentative certificate of Substantial Completion, Engineer will deliver to Owner and Contractor a written recommendation as to division of responsibilities pending final payment between Owner and Contractor with respect to security, operation, safety, and protection of the

tentative certificate as Engineer believes justified after

final payment between Owner and Contractor with respect to security, operation, safety, and protection of the Work, maintenance, heat, utilities, insurance, and warranties and guarantees. Unless Owner and Contractor agree otherwise in writing and so inform Engineer in writing prior to Engineer's issuing the definitive certificate of Substantial Completion, Engineer's aforesaid recommendation will be binding on Owner and Contractor until final payment.

E. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the tentative list.

14.05 Partial Utilization

A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:

- 1. Owner at any time may request Contractor in writing to permit Owner to use or occupy any such part of the Work which Owner believes to be ready for its intended use and substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 14.04.A through D for that part of the Work.
- 2. Contractor at any time may notify Owner and Engineer in writing that Contractor considers any such part of the Work ready for its intended use and substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
- 3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 14.04 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
- 4. No use or occupancy or separate operation of

part of the Work may occur prior to compliance with the requirements of Paragraph 5.10 regarding property insurance.

14.06 Final Inspection

A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

14.07 Final Payment

A. Application for Payment:

- 1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, marked-up record documents (as provided in Paragraph 6.12), and other documents, Contractor may make application for final payment following the procedure for progress payments.
- 2. The final Application for Payment shall be accompanied (except as previously delivered) by: a. all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by Paragraph 5.04.B.6;
- b. consent of the surety, if any, to final payment;c. a list of all Claims against Owner that Contractor believes are unsettled; and
- d. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of or Liens filed in connection with the Work.
- 3. In lieu of the releases or waivers of Liens specified in Paragraph 14.07.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (i) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (ii) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien.
- B. Engineer's Review of Application and Acceptance:
- 1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract documents, Engineer is satisfied that the Work has been

completed and Contractor's other obligations under the Contract Documents have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of payment and present the Application for Payment to Owner for payment. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable subject to the provisions of Paragraph 14.09. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

C. Payment Becomes Due:

1. Thirty days after the presentation to Owner of the Application for Payment and accompanying documentation, the amount recommended by Engineer, less any sum Owner is entitled to set off against Engineer's recommendation, including but not limited to liquidated damages, will become due and will be paid by Owner to Contractor.

14.08 Final Completion Delayed

A. If, through no fault of Contractor, final completion of the Work is significantly delayed, and if Engineer so confirms, Owner shall, upon receipt of Contractor's final Application for Payment (for Work fully completed and accepted) and recommendation of Engineer, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by Owner for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if bonds have been furnished as required in Paragraph 5.01, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by Contractor to Engineer with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

14.09 Waiver of Claims

A. The making and acceptance of final payment will constitute:

- 1. a waiver of all Claims by Owner against Contractor, except Claims arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 14.06, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from Contractor's continuing obligations under the Contract Documents; and
- 2. a waiver of all Claims by Contractor against Owner other than those previously made in accordance with the requirements herein and expressly acknowledged by Owner in writing as still unsettled.

ARTICLE 15 – SUSPENSION OF WORK AND TERMINATION

15.01 Owner May Suspend Work

A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by notice in writing to Contractor and Engineer which will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be granted an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if Contractor makes a Claim therefor as provided in Paragraph 10.05.

15.02 Owner May Terminate for Cause

A. The occurrence of any one or more of the following events will justify termination for cause:

- 1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule established under Paragraph 2.07 as adjusted from time to time pursuant to Paragraph 6.04);
- 2. Contractor's disregard of Laws or Regulations of any public body having jurisdiction;
- 3. Contractor's repeated disregard of the authority of Engineer; or
- 4. Contractor's violation in any substantial way of any provisions of the Contract Documents.
- B. If one or more of the events identified in Paragraph 15.02.A occur, Owner may, after giving Contractor (and surety) seven days written notice of its intent to terminate the services of Contractor:
- 1. exclude Contractor from the Site, and take possession of the Work and of all Contractor's tools, appliances, construction equipment, and machinery at the Site, and use the same to the full extent they could be used by Contractor (without liability to Contractor for trespass or conversion);
- 2. incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere; and
- 3. complete the Work as Owner may deem expedient.
- C. If Owner proceeds as provided in Paragraph 15.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Owner arising out of or relating to completing the Work, such excess will be paid to Contractor. If such claims, costs, losses, and damages exceed such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer

as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this Paragraph, Owner shall not be required to obtain the lowest price for the Work performed.

D. Notwithstanding Paragraphs 15.02.B and 15.02.C, Contractor's services will not be terminated if Contractor begins within seven days of receipt of notice of intent to terminate to correct its failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt of said notice.

E. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue. Any retention or payment of moneys due Contractor by Owner will not release Contractor from liability.

F. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 5.01.A, the termination procedures of that bond shall supersede the provisions of Paragraphs 15.02.B and 15.02.C.

15.03 Owner May Terminate For Convenience
A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):

- 1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work; 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses;
- 3. all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred in settlement of terminated contracts with Subcontractors, Suppliers, and others; and 4. reasonable expenses directly attributable to
- B. Contractor shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination. 15.04 *Contractor May Stop Work or Terminate*A. If, through no act or fault of Contractor, (i) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (ii) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (iii) Owner fails for 30 days to pay Contractor any sum finally

determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the Contract and recover from Owner payment on the same terms as provided in Paragraph 15.03.

B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this Paragraph 15.04 are not intended to preclude Contractor from making a Claim under Paragraph 10.05 for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this Paragraph.

ARTICLE 16 – DISPUTE RESOLUTION

16.01 Methods and Procedures

A. Either Owner or Contractor may request mediation of any Claim submitted to Engineer for a decision under Paragraph 10.05 before such decision becomes final and binding. The mediation will be governed by the Construction Industry Mediation Rules of the American Arbitration Association in effect as of the Effective Date of the Agreement. The request for mediation shall be submitted in writing to the American Arbitration Association and the other party to the Contract. Timely submission of the request shall stay the effect of Paragraph 10.05.E.

B. Owner and Contractor shall participate in the mediation process in good faith. The process shall be concluded within 60 days of filing of the request. The date of termination of the mediation shall be determined by application of the mediation rules referenced above. C. If the Claim is not resolved by mediation, Engineer's action under Paragraph 10.05.C or a denial pursuant to Paragraphs 10.05.C.3 or 10.05.D shall become final and binding 30 days after termination of the mediation unless, within that time period, Owner or Contractor:

- 1. elects in writing to invoke any dispute resolution process provided for in the Supplementary Conditions; or
- agrees with the other party to submit the Claim to another dispute resolution process; or
 gives written notice to the other party of the intent to submit the Claim to a court of competent jurisdiction.

ARTICLE 17 – MISCELLANEOUS

17.01 Giving Notice

A. Whenever any provision of the Contract

Documents requires the giving of written notice, it will be deemed to have been validly given if:

- 1. delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended; or
- 2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

17.02 Computation of Times

A. When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

17.03 Cumulative Remedies

A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract Documents. The provisions of this Paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

17.04 Survival of Obligations

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor. 17.05 *Controlling Law*

A. This Contract is to be governed by the law of the state in which the Project is located.

17.06 Headings

A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these

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SUPPLEMENTARY CONDITIONS

These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract as indicated below. All provisions that are not so amended or supplemented remain in full force and effect. The terms used in these Supplementary Conditions have the meanings stated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof. The address system used in these Supplementary Conditions is the same as the address system used in the General Conditions, with the prefix "SC" added thereto.

SC-1.01. Add the following language at the end of Paragraph 1.01.A.19:

Engineer is the General Superintendent for the Sewerage and Water Board of New Orleans or delegate and has the authority provided in this Contract to approve or disapprove all changes to the Contract documents.

SC-1.01. Add the following language at the end of Paragraph 1.01.A.44:

Substantial Completion is further defined as (i) that degree of completion of the Project's operating facilities or systems sufficient to provide Owner the full time, uninterrupted, and continuous beneficial operation of the Work; and (ii) required functional, performance and acceptance, or startup testing has been successfully demonstrated for components, devices, equipment, and instrumentation and control to the satisfaction of Engineer in accordance with the requirements of the Specifications.

- SC-1.01. Add the following new paragraph immediately after Paragraph 1.01.A.51:
 - 1.01.A.52. Specialist—The term Specialist refers to a person, partnership, firm, or corporation of established reputation (or if newly organized, whose personnel have previously established a reputation in the same field), which is regularly engaged in, and which maintains a regular force of workers skilled in either (as applicable) manufacturing or fabricating items required by the Contract Documents, or otherwise performing Work required by the Contract Documents. Where the Specifications require the installation by a Specialist, that term shall also be deemed to mean either the manufacturer of the item, a person, partnership, firm, or corporation licensed by the manufacturer, or a person, partnership, firm, or corporation who will perform the Work under the manufacturer's direct supervision.
 - 1.01.A.53. *Construction Coordinator*—The term Construction Coordinator, where and when used, refers to an authorized representative of Owner or Engineer who may be assigned to the Site or any part thereof to monitor and oversee construction activities by Contractor. Synonymous with Resident Project Representative (RPR) and Owner's Representative.
 - 1.01.A.54 *Owner's Representative*—The term Owner's Representative, where and when used, refers to an authorized representative of Owner who may be assigned to the Site or any part thereof to monitor and oversee construction activities by Contractor. Synonymous with Resident Project Representative (RPR) and Construction Coordinator.
- SC-2.01. Delete the wording "and Owner" and "each" in lines 2 and 7 in Paragraph 2.01.B
- SC-2.02. Amend first sentence in Paragraph 2.02.A to read as follows:

 2.02.A. Upon award of Contract, Owner will furnish Contractor with complete conformed project documents (Drawings and Project Manual) in electronic format.
- SC-2.03. Delete the third sentence of Paragraph 2.03.A in its entirety.
- SC-3.01. Add the following new paragraph immediately after Paragraph 3.01.C:
- 3.01.D. Sections of Division 01, General Requirements, govern the execution of the Work of all sections of the Specifications.
- SC-4.02. Add the following new paragraph(s) immediately after Paragraph 4.02.B:
- 4.02.D. The following drawings of physical conditions relating to existing surface and subsurface structures at the Site (except Underground Facilities) are known to Owner:

4.02.D.1. Record drawings of the Main Water Purification Plant.

4.02.E. Copies of reports and drawings itemized in SC-4.02.C and SC-4.02.D that are not included with Bidding Documents may be examined at Owner's offices during regular business hours. These reports and drawings are not part of the Contract Documents, but the "technical data" contained therein upon which Contractor may rely, as expressly identified and established above, are incorporated in the Contract Documents by reference. Contractor is not entitled to rely upon any other information and data known to or identified by Owner.

SC-4.06. Delete Paragraphs 4.06.A and 4.06.B in their entirety and insert the following in their place:

4.06.A. No reports or drawings related to Hazardous Environmental Conditions are known to Owner.

SC-5.01. Delete in Paragraph 5.01.A first sentence the wording "and payment"

SC-5.02. Add the following new paragraph immediately after Paragraph 5.02.A:

SC-5.02. B. As an alternative to the requirements in paragraph A above, bonds may also be provided by a Louisiana Domiciled Insurance company with at least an A.M. Best's Financial Strength Rating of A minus (A-) rating, or the bond shall be written by an insurance company that is either domiciled in Louisiana or owned by Louisiana residents and is licensed to write surety bonds. In addition, any surety bond written for a public works project shall be written by a surety or insurance company that is currently licensed to do business in the State of Louisiana. Surety and insurance companies from which the bonds and insurance for this Project are purchased under the provisions of paragraph 5.02.A shall have an A.M. Best's Financial Strength Rating of A minus (A-) or better with a Financial Size Category of no less than VII, in addition to other requirements specified herein.

SC-5.04. Add the following language after Paragraph 5.04.B.1: Policies will endorse the following parties or entities as additional insured:

5.04.B.1.a. Sewerage and Water Board of New Orleans, 625 St. Joseph Street, New Orleans, Louisiana 70165 5.04.B.1.b. The City of New Orleans, 1300 Perdido Street, New Orleans, Louisiana 70112 5.04.B.1.c. [____] 5.04.B.1.d. [____] 5.04.B.1.d. [____]

SC-5.04. Add the following new paragraph immediately following Paragraph 5.04.B:

5.04. C. Insurance: General Requirements. The Contractor will maintain, at his own cost and expense, and in good standing, such insurance as will protect the Sewerage and Water Board of New Orleans (the Board), the City of New Orleans (the City,) their officers, officials, employees, boards, commissions and volunteers, as well as the Contractor himself and any subcontractors from and against any and all claims for damages to public and private property and personal injury, including death, to employees or to the public, which may arise from any operations under this Contract or any of its subcontracts. The coverage will contain no special limitations on the scope of protection afforded to the Board and the City. Both the Board and the City will appear as "Additional Insured" on all Commercial General Liability and Business Automobile Liability. Any failure to comply with the reporting provisions of a policy will not affect coverage provided to the Board and the City, their officers, officials, employees, boards and commissions and volunteers. The Contractor's insurance will apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability. In general, insurance is to be placed with insurers with an A.M. Best's rating of A-: V, although this requirement may be reviewed and modified by the Risk Manager of the Sewerage and Water Board of New Orleans in the best interest of the Board. The Risk Manager may also consider performing such review upon written request from the Contractor. The Contractor shall furnish the Sewerage and Water of New Orleans with certificates of insurance affecting coverage required by this Contract. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates of insurance are to be received and approved by the Risk Manager of the Sewerage and Water Board of New Orleans, 625 St. Joseph St., Rm. 119, New Orleans, LA 70165, before work commences. The Sewerage and Water Board of New Orleans reserves the right to require complete, certified copies of all insurance policies at any time, as proof that the insurance placed meets the requirements of this Contract. If the insurance is written subject to a deductible clause, Contractor assumes responsibility for the amount of the deductible. In addition, the Contractor shall be required to furnish to the Risk Manager of the Sewerage and Water Board of New Orleans all copies of investigative reports with regard to any and all claims with the Contractor and his insurance carriers, relative to the contract, with the exception of claims filed with his Workers' Compensation Insurance. Such reports shall include dates, location and description of loss as well as amounts of settlements or judgments in order that annual aggregate limits maybe monitored by the Sewerage and Water Board of New Orleans for the Contactor's compliance with these Specifications. The furnishing of insurance as provided above shall not relieve the Contractor of his responsibility for losses not covered by insurance. All policies shall be with insurance companies authorized to do business in Louisiana and shall remain in full force and effect until the final completion of the work and acceptance thereof by the authority of the Board. 5.04.C.1 Subrogation The Contractor, Subcontractor(s), and their insurers shall agree to waive all the rights of subrogation against the Board, the City, and their

officers, officials, employees, boards and commissions, and volunteers for losses arising from work performed by the Contractor for the Board and the City.

5.04.C.2. Insurance Cancellations and Stop-Work Each insurance policy required by this contract shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party, or reduced in coverage or in limits except after thirty (30) days prior written notice has been given to the Risk Manager, 625 St. Joseph St., Rm. 119, New Orleans, LA 70165, of the Sewerage & Water Board of New Orleans, via certified mail. The Contractor and/or his insurer shall notify the Risk Manager of the Sewerage and Water Board of New Orleans at least thirty (30) days in advance of any insurance coverage to be canceled or of any insurance coverage that will expire. The Contractor shall simultaneously furnish the Board evidence of new coverage to be effective the same day and hour of the expired or canceled coverage. In the event the Contractor and/or his insurer fails to submit this evidence of new coverage five (5) days prior to the cancellation date or expiration date of any policy or policies, the Sewerage and Water Board will have the right to obtain the required coverage to become effective on the date of cancellation or expiration of said policies. The cost of such new policies shall be at the expense of the Contractor and any expenditure incurred by the Board for this coverage will be deducted from any balance due to the Contractor. Should the Board be unable to secure new coverage to take the place of the expired or cancelled policy or policies, a "stop work" order will issue and all work on the contract shall cease on the same date and hour as the coverage ceases. Should the Contractor fail or refuse to secure coverage within five (5) days after the date of the "stop work" order, the Contractor shall be declared to be in default, and the contract between the parties shall be considered cancelled and of no force or effect between the parties reserving all the rights of the Board against the Contractor and his surety. 5.04.C.3. Insurance Policies, Endorsements, and Limits Required The following are the types of insurance policies and the minimum limits of insurance coverage which shall be maintained by the Contractor during the entire term of the Contract: 5.04.C.3.a. WORKERS' COMPENSATION AND EMPLOYERS LIABILITY INSURANCE WORKERS' COMPENSATION AND EMPLOYERS LIABILITY INSURANCE, as will protect Contractor from claims under Louisiana Workers' Compensation Laws. The Workers' Compensation section of the policy shall afford Statutory Limits

and be in accordance with all Louisiana Workers' Compensation Statutes. The Employers Liability limit shall not be less than \$3,000,000 each accident for bodily injury by accident and \$3,000,000 each employee/policy limit for bodily injury by disease. Whenever any Federal Longshoreman's and Harbor Workers' Act and shall also include protection for injuries and/or death to Master and Members of the crews of vessels with statutory limits in accordance with the Jones Act. 5.04.C.3.b. COMMERCIAL GENERAL LIABILITY INSURANCE COMMERCIAL GENERAL LIABILITY INSURANCE, with a limit of not less than \$2,000,000 each occurrence and not less than \$4,000,000 general annual aggregate, including Explosion, Collapse, and Underground Property Damage Hazards. The Products-Completed Operations aggregate limit shall not be less than \$2,000,000 each occurrence. The general aggregate limit shall apply separately to this project.

5.04.C.3.c. BUSINESS AUTOMOBILE LIABILITY INSURANCE BUSINESS AUTOMOBILE LIABILITY INSURANCE, which shall cover liability arising out of accidents involving any auto (including Owned, Hired, and Non-Owned autos). The limit of liability shall not be less than \$1,000,000 each accident for all injuries, property damage, and/or death resulting from any one occurrence.

5.04.C.3.d. OWNER'S AND CONTRACTOR'S PROTECTIVE LIABILITY INSURANCE OWNER'S AND CONTRACTOR'S PROTECTIVE LIABILITY INSURANCE, as will protect the Contractor, the Sewerage and Water Board of New Orleans, and the City of New Orleans from and against any and all claims and lawsuits involving vicarious liability. The limits of liability shall be the same as specified in Paragraph (b) above, and shall include Explosion, Collapse and Underground Hazards.

5.04.C.3.e. PROFESSIONAL LIABILITY INSURANCE PROFESSIONAL LIABILITY INSURANCE, as may be applicable to the particular profession or service to be provided, with a limit of not less than \$2,000,000 each Claim, with at least a \$4,000,000 annual aggregate, without any restrictive "negligent act, negligent error, or negligent omission" clause, and sufficient to protect the Contractor, the Board, and the City, for a five (5) year period from completion of this contract, against any and all claims which may arise from the Contractor's negligent performance of work described herein. 5.04.C.3.f. PROPERTY INSURANCE PROPERTY INSURANCE, required on all work except sewer and water drainage pipelines, reinforced concrete canals, work completely underground, and similar work (however Contractor is not relieved of responsibility therefore) as follows:

5.04.C.3.f(1). ALL RISKS BUILDERS RISK INSURANCE (covering Fire, Extended Coverage, Vandalism and Malicious Mischief) will be carried on a completed value or reporting form, for not less than 100 percent of the value of the work, including foundations. Coverage will include all machinery and equipment to be installed, whether furnished by the Sewerage & Water Board or by Contractor, for not less than 100 percent of the installed value of the machinery and equipment. This insurance shall be written in the same Insurance Company carrying the Builder's Risk Insurance, shall include testing and startup, shall for partial utilization of the Work by Owner, and shall terminate only when installation has been accepted by the Sewerage and Water Board. The All Risks Builder's Risk Policy shall include the names

of the Sewerage & Water Board of New Orleans, and City of New Orleans, and will cover the interests of all subcontractors without specifically naming them.

5.04.C.3.g. WORKERS' COMPENSATION AND UNEMPLOYMENT COVERAGE, ADDITIONAL CONDITIONS 5.04.C.3.g(1) WORKERS' COMPENSATION: The Contractor expressly agrees and acknowledges that it is an "independent contractor" as defined in LSA-R.S.23:1021(6), and that its employees shall not be considered employees of the Board for workers' compensation benefits or coverage.

5.04.C.3.g(2) EXCLUSIVE OF UNEMPLOYMENT COMPENSATION COVERAGE: Contractor herein expressly agrees and acknowledges that it is an "independent contractor" as defined in LSA-R.S.23:1472(E0, that neither the contractor nor anyone employed by the Contractor shall be considered an employee of the Board for the purpose of employment of compensation coverage.

SC-5.06. Delete Paragraph 5.06.A in its entirety.

SC-5.06. Delete Paragraph 5.06.B in its entirety.

SC-5.06. Delete Paragraph 5.06 E in its entirety.

SC-5.07. Delete third sentence of Paragraph 5.07.A in its entirety and insert the following in its place:

Contractor and Contractor's insurers waive all rights against Owner and their respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Subcontractors and Engineer, and all other individuals or entities identified in the Supplementary Conditions as loss payees (and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them) under such policies for losses and damages so caused.

SC-5.07. Delete the last sentence of Paragraph 5.07.A in its entirety and insert the following in its place:

None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Contractor as trustee or otherwise payable under any policy so issued.

SC-5.07. Delete Paragraph 5.07.B in its entirety.

SC-5.07. Delete Paragraph 5.07.C in its entirety.

SC-5.08. Delete Paragraph 5.08.A in its entirety.

SC-5.08. Delete Paragraph 5.08.B in its entirety.

SC-6.02. Add the following new paragraph immediately after Paragraph 6.02.B:

6.02.C. Contractor shall reimburse Owner for Engineer's additional extraordinary costs for onsite personnel overtime work resulting from Contractor's overtime operations. Reimbursement shall be on the cost basis defined in Paragraph 14.02.D.4 of these Supplementary Conditions.

6.03. Add the following new paragraph immediately after Paragraph 6.03.C:

6.03.D. Domestic Manufacture:

6.03.D.1. All equipment to be furnished and components of all items specified herein, except bearings, shall be of domestic produce, manufacture and assembly, i.e., manufactured and assembled within the limits of the United States. Parts must be available from suppliers that manufacture components in the USA. The Board reserves the right to waive this requirement if, in the opinion of the Engineer, it appears to be in the best interests of the Board.

6.03.D.2. Sewerage and Water Board staff will determine the ability of the lowest bidder to design and build the equipment and machinery specified hereon. Along with other factors to be considered by Sewerage and Water Board staff will be the manufacturer's facilities, listings of similar equipment and installations, equipment reliability and longevity. Should the lowest bidder be found "non-responsive", then an informal hearing will be held to provide the lowest bidder the opportunity to refute the reasons for disqualification.

SC-6.05. Add the following language at the end of Paragraph 6.05.E: Reimbursement rates for Engineer or their officers, directors, members, partners, employees, agents, and other consultants and subcontractors for evaluation of proposed substitutes shall be on the basis established in Paragraph 14.02.D.4 of these Supplementary Conditions. SC-6.06. Add the following new paragraph immediately after Paragraph 6.06.G:

6.06.H. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor on account of Work performed for Contractor by a particular Subcontractor or Supplier.

SC-6.08. Add the following language:

6.08 Permits:

A. Before commencing work, the Contractor shall obtain, at his own expense, any required permits from the City of New Orleans. The Contractor shall also secure, at his own expense, any necessary inspection certificates required after the work is completed.

B. Evidence of compliance shall be furnished to the Board prior to starting work, in the case of permits, or within 10 calendar days after completion of that work requiring inspection certificates.

SC-6.11. Add the following language to the end of Paragraph 6.11.A.1: Contractor shall not enter upon nor use property not under Owner control until appropriate easements have been executed and a copy is on file at the Site.

SC-6.13. Add the following new paragraphs immediately after 6.13.C:

6.13.C.1. The Owner's Safety Orientation Notice is applicable to the Work and is appended to these Supplementary Conditions.

6.13.C.2. The Owner's Drug-Free Workplace Policy is applicable to the Work and is appended to these Supplementary Conditions.

6.13.C.3. Owner's Safety Clearance Procedure

Definitions:

Operator: The Board employee who is onsite and in responsible charge of the operation of the plant, station, or other facility.

Out of Service: The electrical/mechanical disconnection of equipment which is to remain inoperable.

Power Dispatcher: The shift employee on duty at Central Control at the time safety clearance occurs.

Signee: The person who actually tags-out equipment for safety clearance.

Supervisor/Foreman: The Board employee who is the supervisor/foreman in responsible charge of the repair/maintenance of one or more work locations which requires safety clearance. This person may not necessarily be "onsite" at any particular location.

Tag-out: The physical tagging of equipment by an operator for the purpose of disabling equipment.

Lock-out: The physical locking of equipment by an operator for the

purpose of disabling equipment.

General Provisions

1) All equipment repair/maintenance work which is scheduled and requires safety clearance should be presented to Central Control at the beginning of each workday by the supervisor/foreman/electrical engineer in charge of the repair/maintenance. Twenty-four (24) hour advance notice of scheduled work for major outages is desirable; however, it is understood that due to the nature of the services provided by the Board this preferred notice may not be possible for every safety clearance. 2) In cases where two or more crafts are working on, or require safety clearance on the same equipment, the supervisor/foreman/electrical engineer for each craft must follow the appropriate safety clearance procedure and the equipment must be tagged out for each craft's signee. No equipment can be tested and/or restored to service until all tags have been removed in accordance with the tag removal procedure. 3) When an operator requests service for equipment at an unmanned facility, i.e. an unmanned sewer station or unmanned underpass station, from either Electrical Maintenance or Mechanical Maintenance, the appropriate maintenance department shall request the responsible operator to tag-out the equipment. When the appropriate maintenance department, in the course of servicing this equipment, requires restoration of power, the appropriate maintenance department shall contact the responsible operator directly (if operator is present) or by radio or telephone (if operator is absent) and request that the responsible operator grant his permission. If the power is to be restored for only a short duration, the appropriate maintenance department shall thereafter contact the operator for permission to either remove power or restore power, as often as needed. The operator shall log each request. If the request to restore power is for a short duration only, and the operator does not received contact from the appropriate maintenance personnel to remove power again, the operator shall make every attempt to contact the appropriate maintenance personnel in order to ensure that no accident has occurred. 4) If equipment must remain "Out of Service" upon completion of the onsite work, the signee must request their tag be replaced with an "Out of Service" tag in the name of their department: e.g. "Out of Service - Electrical Maintenance", in addition it must be physically locked-out by that department. However, the "Out of Service" tag does not relinquish the responsibility of following the safety clearance procedure each day that piece of equipment is worked on. 5) Any equipment restored to service after being tagged "Out of Service" must be tested through operational test procedures. The signee must remain, when possible, on-site until testing is complete. 6) Any individual involved in these procedures may halt the procedure at any time if it is felt the safety of the personnel and/or equipment warrants said stoppage, or if conditions within the system change that may require postponement of the work. 7) In the event the responsible person, signee, leaves the job site without releasing the cleared equipment and is unreachable to release their tag-out the following procedure must be enacted before the signees name, tag-out, can be removed from the cleared equipment.

a) Cause must be established by the senior power dispatcher giving reason to remove the tag-out.

- b) Senior power dispatcher must receive orders from the Chief of Operations or higher, in his absence, to remove said tag-out.
- c) Concurrence given by a senior representative of the following:
 - Department or company to which the signee works for.
 - Senior representative of the plant, station, facility in which the tagout occurs.
 - If jobsite is in the field then, inspection by Electrical Engineering assuring work has halted for the day.
- d) Once all areas have been satisfied then the senior power dispatcher may have the signees tag-out removed.

NOTE: The above and following procedures may be deviated from above at the discretion of the power dispatcher in cases of emergency.

- SC-6.11. Add the following language to the end of Paragraph 6.11.D:
- 6.11.D. *Water and Other Utilities*. It is the responsibility of the Contractor to make all necessary arrangements for the provision of water, electricity, drainage, sanitary sewage disposal, gas, compressed air, and any other utility service required to prosecute the work of this contract. Water used by the Contractor at the job site will be furnished by the Board at no cost to the Contract, if conditions permit. Costs of all other services shall be borne by the Contractor.
- 6.11.E. *Hydrant Connections*. Connections to fire hydrants shall only be made with meters obtained from the Sewerage and Water Board Customer Service Department, 504-585-2097, which shall record water usage for record purposes, and which shall be returned to the Board as a condition of acceptance of the Contract. Application for the meter requires a \$1,500.00 deposit that is refundable upon return of the meter in undamaged and operable condition. The hydrant meter application and instructions are available on the Sewerage and Water Board website: https://www.swbno.org/custserv_information_docs.asp. SC-6.17. Add the following new paragraphs immediately after Paragraph 6.17.E.1:
- 6.17.E.2. Contractor shall furnish required submittals with sufficient information and accuracy in order to obtain required approval of an item with no more than the number of submittals specified in Paragraph 14.02.D.4 of these Supplementary Conditions. Engineer will record time for reviewing subsequent submittals of Shop Drawings, Samples, or other items requiring approval and Contractor shall reimburse Owner for Engineer's charges for such time in accordance with Paragraph 14.02.D.4 of these Supplementary Conditions.
- 6.17.E.3. In the event Contractor requests a substitution for a previously approved item, Contractor shall reimburse Owner for Engineer's charges for such time, unless the need for such substitution is beyond the control of Contractor.
- SC-7.02. Delete Paragraphs 7.02.A and 7.02.B in their entirety and insert the following in their place:
- 7.02.A. Owner intends to contract with others for the performance of other work on the Project at the Site. The authority and responsibility of the Construction Coordinator for the various prime contractors, utility owners, and Owner (if present at the Site) shall be as follows:
- 7.02.A.1 Owner's Representative: Shall have authority and responsibility for coordination of the various contractors at the Site. Owner's Representative shall be named by the Owner if necessary.
- 7.02.A.2. Specific matters to be covered by such authority and responsibility: Prioritization of work activity should conflicts occur in work areas between contractors or between contractor and Owner's operations; approval of requests to curtail, interrupt, or otherwise disrupt Owner operation to allow Contractor work to be scheduled and/or occur; cancellation of scheduled Contractor activity in the event Owner requirements supersede prior plans; other issues that require approval or prioritization relative to interference with Owner operations or conflicts with other.
- 7.02.A.3. Extent of such authority and responsibility: Owner's Representative decision and direction to Contractor shall be final. Planning and discussions to coordinate options relative to operational disruptions requested by Contractor will be scheduled by Owner's Representative. Owner's Representative will review and respond to requests by the Contractor for outage, interconnection, operational disruption, contract activity prioritization, or the like, within 10 business days.
- 7.02.A.4. Limitations of such authority and responsibility: Owner's Representative may not modify the Contract or its terms and conditions.
- 7.02.B. Unless expressly assigned to the Construction Coordinator, all other authority and responsibility will remain vested with each prime contractor, utility owner, or Owner (if present at the Site).
- SC-7.04. Add the following new paragraph immediately after Paragraph 7.03:
- SC-7.04. Claims Between Contractors
- 7.04.A. Should Contractor cause damage to the work or property of any other contractor at the Site, or should any claim arising out of Contractor's performance of the Work at the Site be made by any other contractor against Contractor, Owner, Engineer, or the Construction Coordinator, if applicable, Contractor shall (without involving Owner, Engineer, or Construction Coordinator) either i) remedy the damage; ii) agree to compensate the other contractor for remedy of the

damages; or iii) remedy the damages and attempt to settle with such other contractor by agreement, or to otherwise resolve the dispute by arbitration or at law.

7.04.B. Contractor shall, to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner, Engineer, the Construction Coordinator (if applicable) and the officers, directors, members, partners, employees, agents, and other consultants and subcontractors of each and any of them from and against all Claims, costs, losses and damages (including, but not limited to, fees and charges of engineers, architects, attorneys, and other professionals and court and arbitration costs) arising directly, indirectly or consequentially out of any action, legal or equitable, brought by any other contractor against Owner, Engineer, their officers, directors, members, partners, employees, agents, and other consultants and subcontractors, or the Construction Coordinator (if applicable) to the extent said Claim is based on or arises out of Contractor's performance of the Work. Should another contractor cause damage to the Work or property of Contractor or should the performance of work by any other contractor at the Site give rise to any other Claim, Contractor shall not institute any action, legal or equitable, against Owner, Engineer, or the Construction Coordinator (if applicable) or permit any action against any of them to be maintained and continued in its name or for its benefit in any court or before any arbiter which seeks to impose liability on or to recover damages from Owner, Engineer, or the Construction Coordinator (if applicable) on account of any such damage or Claim.

7.04.C. If Contractor is delayed at any time in performing or furnishing the Work by any act or neglect of another contractor, and Owner and Contractor are unable to agree as to the extent of any adjustment in Contract Times attributable thereto, Contractor may make a Claim for an extension of times in accordance with Article 12. An extension of the Contract Times shall be Contractor's exclusive remedy with respect to Owner, Engineer, and Construction Coordinator (if applicable) for any delay, disruption, interference, or hindrance caused by any other contractor. This paragraph does not prevent recovery from Owner, Engineer, or Construction Coordinator (if applicable) for activities that are their respective responsibilities.

SC-8.02. Delete Paragraph 8.02.A in its entirety and replace with the following:

8.02.A. In case of termination of the employment of Engineer, Owner shall appoint an Engineer whose status in the Contract Documents shall be that of the former Engineer.

SC-8.06. Delete Paragraph 8.06.A in its entirety.

SC-8.11. Delete Paragraph 8.11.A in its entirety.

SC-9.03. Add the following new paragraphs immediately after Paragraph 9.03.A:

9.03.B. Resident Project Representative (RPR) will be furnished by Owner. The responsibilities, authority, and limitations of the RPR are limited to those of Engineer in accordance with Paragraph 9.09 and as set forth elsewhere in the Contract Documents and are further limited and described below.

9.03.C. Responsibilities and Authority:

9.03.C.1. Schedules: Review and monitor Progress Schedule, Schedule of Submittals, and Schedule of Values prepared by Contractor and consult with Engineer concerning acceptability.

9.03.C.2. Conferences and Meetings: Conduct or attend meetings with Contractor, such as preconstruction conferences, progress meetings, Work conferences and other Project related meetings.

9.03.C.3. Liaison: (i) Serve as Engineer's liaison with Contractor, working principally through Contractor's authorized representative, and assist in understanding the intent of the Contract Documents; (ii) assist Engineer in serving as Owner's liaison with Contractor when Contractor's operations affect Owner's onsite operations; (iii) assist in obtaining from Owner additional details or information when required for proper execution of the Work.

9.03.C.4. Interpretation of Contract Documents: Inform Engineer when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor clarifications and interpretations as issued by Engineer.

9.03.C.5. Submittals: Receive submittals that are furnished at the Site by Contractor and notify Engineer of availability for examination. Advise Engineer and Contractor of the commencement of any Work or arrival of materials and equipment at Site, when recognized, requiring a Shop Drawing or Sample if the submittal has not been approved by Engineer.

9.03.C.6. Modifications: Consider and evaluate Contractor's suggestions for modifications in Drawings or Specifications and provide recommendations to Engineer; transmit to Contractor, in writing decisions as issued by Engineer.

9.03.C.7. Review of Work and Rejection of Defective Work: (i) Conduct onsite observations of the Work in progress to assist Engineer in determining if the Work is, in general, proceeding in accordance with the Contract Documents; (ii) inform Engineer and Contractor whenever RPR believes that any Work is defective; (iii) advise Engineer whenever RPR believes that any Work will not produce a completed Project that conforms generally to the Contract Documents or will imperil the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents, or has been damaged or does not meet the requirements of any inspection test, or approval required to be made; and advise Engineer of that part of the Work in progress that RPR believes should be corrected or rejected or uncovered for observation, or requires special testing, inspection, or approval.

- 9.03.C.8. Inspections, Tests, and System Startups: (i) Verify tests, equipment and systems startups and operating and maintenance training are conducted in the presence of appropriate personnel, and that Contractor maintains adequate records thereof; (ii) observe, record, and report to Engineer appropriate details relative to the test procedures and system startups; and (iii) accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, record the results of these inspections, and report to Engineer.
- 9.03.C.9. Records: (i) Maintain records for use in preparing Project documentation; (ii) keep a diary or log book recording pertinent Site conditions, activities, decisions and events; (iii) record names, addresses, fax numbers, e-mail addresses, web site locations, and telephone numbers of Contractors, Subcontractors, and major Suppliers of materials and equipment.
- 9.03.C.10. Payment Requests: Review Applications for Payment with Contractor for compliance with the established procedure for their submission and forward with recommendations to Engineer, noting particularly the relationship of the payment requested to the Schedule of Values, Work completed, and materials and equipment delivered at the Site but not incorporated in the Work.
- 9.03.C.12. Certificates, Operation and Maintenance Manuals: During the course of the Work, verify materials and equipment certificates and operation and maintenance manuals and other data required by Specifications to be assembled and furnished by Contractor are applicable to the items actually installed and in accordance with the Contract Documents, and have these documents been delivered to Engineer for review and forwarding to Owner prior to payment for that part of the Work. 9.03.C.13. Completion: (i) Participate in a Substantial Completion inspection; assist in determination of Substantial Completion and the preparation of lists of items to be completed or corrected; (ii) Participate in a final inspection in the company of Engineer, Owner, and Contractor and prepare a final list of items to be completed and deficiencies to be remedied; and (iii) observe whether items on final list have been completed or corrected and make recommendations to Engineer concerning acceptance.
- 9.03.D. Limitations of Authority: Resident Project Representative will not:
- 9.03.D.1. have authority to authorize a deviation from Contract Documents or substitution of materials or equipment, unless authorized by Engineer; or
- 9.03.D.2, exceed the limitations of Engineer's authority as set forth in Contract Documents; or
- 9.03.D.3. undertake any of the responsibilities of Contractor, Subcontractors, Suppliers, or Contractor's authorized representative; or
- 9.03.D.4. advise on, issue directions relative to, or assume control over an aspect of the means, methods, techniques, sequences, or procedures of Contractor's work unless such advice or directions are specifically required by the Contract Documents; or 9.03.D.5 advise on, issue directions regarding, or assume control over safety practices,

precautions, and programs in connection with the activities or operations of Owner or Contractor; or

- 9.03.D.6. participate in specialized field or laboratory tests or inspections conducted offsite by others, except as specifically authorized by Engineer; or 9.03.D.7. accept Shop Drawings or Samples from anyone other than Contractor; or 9.03.D.8. authorize Owner to occupy the Project in whole or in part.
- SC-9.09. Add the following new paragraph immediately after Paragraph 9.09.E:
- 9.09.F. Contractors, Subcontractors, Suppliers, and others on the Project, or their sureties, shall maintain no direct action against Engineer, its officers, employees, affiliated corporations, and subcontractors, for any Claim arising out of, in connection with or resulting from the engineering services performed. Only the Owner will be the beneficiary of any undertaking by Engineer.
- SC-10.05. Delete Paragraphs 10.05.C through 10.05.E in their entirety and insert the following in their place and renumber Paragraph 10.05.F to read 10.05.D:
- 10.05.C. Engineer's Action and Executive Negotiation:
- 10.05.C.1. Engineer's Action:
- 10.05.C.1.a. Engineer will render a formal decision in writing within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any. Engineer's written decision on such Claim, dispute or other matter will be final and binding upon Owner and Contractor, unless within 10 days after issuance of Engineer's written decision, either party appeals the decision by giving the other party and Engineer written notice of request for executive negotiation.
- 10.05.C.1.b. In the event Engineer does not take action on a Claim within said 30 days, the Claim shall be deemed denied. 10.05.C.2. Executive Negotiation:
- 10.05.C.2.a. Within 10 days of the delivery of notice of appeal to Engineer's written decision regarding Claim, dispute or other matter, senior representatives of at least Owner and Contractor, having authority to settle the dispute, and Engineer shall meet at a mutually acceptable time and place, and thereafter as often as they reasonably deem necessary, to exchange relevant information and to attempt to resolve the dispute.
- 10.05.C.2.b. In the event a mutually acceptable decision cannot be reached through executive negotiation within 20 days of the appealing party's notice, or mutually agreeable longer period, or if the party receiving such notice will not meet within 10

days, Owner or Contractor may make a written declaration, delivered to the other party and Engineer, that the executive negotiation is deemed unsuccessful and may initiate further dispute resolution measures in accordance with Article 16. 10.05.C.2.c. If no such dispute resolution procedures have been set forth in Article 16, a written notice of intention to further appeal Engineer's written decision shall be delivered by Owner or Contractor to the other and to Engineer within 30 days after the date upon which the executive negotiation has been declared unsuccessful, or within 60 days after Substantial Completion, whichever is later (unless otherwise agreed in writing by Owner and Contractor), to exercise such rights or remedies as the appealing party may have with respect to such Claim, dispute, or other matter in accordance with applicable Laws and Regulations.

SC-11.01. Delete Paragraph 11.01.A.5.c in its entirety and insert the following in its place:

11.01.A.5.c. Construction Equipment and Machinery:

11.01.A.5.c(1) Rentals of construction equipment and machinery, and the parts thereof in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. Such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.

11.01.A.5.c(2) Costs for equipment and machinery owned by Contractor will be paid at a rate shown for such equipment in the Rental Rate Blue Book published by Equipment Watch. An hourly rate will be computed by dividing the monthly rates by 176. These computed rates will include all operating costs. Costs will include the time the equipment or machinery is in use on the changed Work and the costs of transportation, loading, unloading, assembly, dismantling, and removal when directly attributable to the changed Work. The cost of such equipment or machinery, or parts thereof, shall cease to accrue when the use thereof is no longer necessary for the changed Work. Equipment or machinery with a value of less than \$1,000 will be considered small tools. SC-11.01. Add the following language to the end of Paragraph 11.01.A.5.h: Express and courier services must be approved prior to use.

SC-11.01. Delete Paragraph 11.01.C in its entirety.

SC-11.02. Delete Paragraph 11.02 in its entirety.

SC-12.01. Add the following language to the end of Paragraph 12.01.C.2.c: except, the maximum total allowable cost to Owner shall be the Cost of the Work plus a maximum collective aggregate fee for Contractor and tiered Subcontractors of 20 percent; SC-12.01. Add the following new paragraph immediately after Paragraph 12.01.C:

12.01.D. *Right to Audit:* The Contractor will submit to any SWBNO audit, inspection, and review and, at the SWBNO's request, will make available all documents relating or pertaining to this Contract maintained by or under the control of the Contractor, its employees, agents, assigns, successors and subcontractors, during normal business hours at the Contractor's office or place of business in Louisiana. If no such location is available, the Contractor will make the documents available at a time and location that is convenient for the SWBNO. Administrative and financial records shall be made and kept by the contractor in accordance with generally accepted accounting principles and practices. Records shall include, but are not limited to, accounting records, daily reports, change order requests, correspondences and subcontract files (hard copies as well as computer readable data, if it can be made available). Records must be retained and made available upon request for a minimum of five (5) years following completion or formal acceptance of the contracted project. The Contractor will abide by all provisions of City Code § 2-1120, including but not limited to City Code § 2-1120(12), which requires the Contractor to provide the Office of Inspector General with documents and information as requested. Failure to comply with such requests shall constitute a material breach of the Contract. The Contractor agrees that it is subject to the jurisdiction of the Orleans Parish Civil District Court for purposes of challenging a subpoena. SC-13.03. Delete Paragraph 13.03.B in its entirety and insert the following in its place:

13.03.B. Contractor shall employ an independent testing laboratory or testing agency and shall be responsible for arranging and shall pay for specified tests, inspections, and approvals required for Owner's and Engineer's acceptance of the Work at the Site except: 13.03.B.1. costs incurred in connection with tests or inspections pursuant to Paragraph 13.04 shall be paid for as provided in said paragraph; and 13.03.B.2. as otherwise specifically provided in the Contract Documents. SC-13.03. Add the following language at the end of Paragraph 13.03.D: Tests required by Contract Documents to be performed by Contractor that require test certificates be submitted to Owner or Engineer for acceptance shall be made by an independent testing laboratory or agency licensed or certification is not required, testing laboratories or agencies shall meet the following applicable requirements:

13.03.D.1. Basic requirements of ASTM E329, "Standard Specification for Agencies Engaged in Construction Inspection, Special Inspection, or Testing Materials used in Construction" as applicable.

13.03.D.2. Calibrate testing equipment at reasonable intervals by devices of accuracy, traceable to the National Institute of Standards and Technology or accepted values of natural physical constants.

SC-14.02. Delete Paragraph 14.02.C.1 in its entirety and insert the following in its place:

14.02.C.1. Forty-Five days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended will (subject to the provisions of Paragraph 14.02.D) become due and when due will be paid by Owner to Contractor.

SC-14.02. Add the following new paragraph(s) immediately after Paragraph 14.02.D.3:

14.02.D.4. Items entitling Owner to retain setoffs from the amount recommended,

including but not limited to: 14.02.D.4.a. Owner compensation to Engineer at an estimated average rate of \$150 per each extra personnel hour for labor plus expenses, if applicable, because of the following Contractor-caused events:

14.02.D.4.a.(2). return visits to manufacturing facilities to witness factory testing or retesting;

14.02.D.4.a.(3). Submittal review in excess of two reviews by Engineer for substantially the same submittal, in accordance with Paragraphs 6.17.E.2 and 6.17.E.3 of these Supplementary Conditions; 14.02.D.4.a.(4). evaluation of proposed substitutes and making changes to Contract Documents occasioned thereby, in accordance with Paragraph 6.05.E of these Supplementary Conditions;

14.02.D.4.a.(5). Overtime worked by Contractor necessitating Engineer, and their officers, directors, members, partners, employees, agents, and other consultants and subcontractors of each, Resident Project Representative or Resident Project Representative's Site staff, if any, to work extraordinary overtime in accordance with Paragraph 6.02.C. of these Supplementary Conditions.

14.02.D.4.b. Liability for liquidated damages incurred by Contractor as set forth in the Agreement.

SC-14.06. Add the following new paragraph immediately after Paragraph 14.06.A:

14.06.B. In accordance with Louisiana Statute 38:2248, punch lists will include cost estimate for each item of work identified by Engineer based on mobilization, labor, materials, and equipment costs of correcting each punch list item.

Completed punch list items will be paid upon expiration of 45-day lien period.

SC-14.07. Delete Paragraph 14.07.C.1 in its entirety and insert the following in its place:

14.07.C.1. Forty-five days after presentation to Owner of the final Application for Payment and accompanying documentation, the amount recommended by Engineer less any sum Owner is entitled to set off against Engineer's recommendation, including but not limited to liquidated damages, will become due and, will be paid by Owner to Contractor. The percentage of the value of the work done, as stated in Paragraph 14.02.A.3 of the General Conditions, will be withheld by the Board for a period of not less than forty-five (45) consecutive calendar days after the contract has been accepted by the Board, and such acceptance has been recorded in the Office of the Recorder of Mortgages for the Parish of Orleans. At the end of the forty-five (45) day period, the percentage withheld by the Board, will be paid to the Contractor, less any sums that may be legally deducted under any provisions of this contract, upon the Contract or furnishing the Board with a certificate from the Recorder of Mortgages for the Parish of Orleans, certifying that the contract is clear of all liens and privileges.

SC-14.10. Add the following new paragraph immediately Paragraph 14.09.2:

SC-14.10 *Maintenance Period*. The maintenance period under this contract, except as otherwise specifically provided for herein, shall be for a period of forty-five (45) consecutive calendar days beginning from the day after the contract has been accepted by the Board, and such acceptance has been recorded in the Office of the Recorder of Mortgages for the Parish of Orleans. During the maintenance period the Contractor will repair, at his own expense, all defects in the work that may arise, to the satisfaction of the Engineer. The Contractor shall restore all surfaces for which he is responsible under the specifications, whether unimproved, partially improved, or paved surfaces (See Section B of the General Specifications), and maintain them in good condition to the satisfaction of the Engineer. If the Contractor should fail or refuse to repair, at his own expense, any defects in structures or surfaces developing before the expiration of the aforesaid forty-five (45) days or to adjust satisfactorily any claims for damages to public or private property, the Board shall have the right to continue to hold the retainer and to make the necessary repairs and to satisfy the claims for damages, by such means as the Board shall elect, and to reimburse itself for the cost of these repairs and satisfied claims, out of the said retainer. Any surplus of this retainer will then be paid the Contractor, under the conditions above stated, any deficiency shall be made good by the surety.

SC-15.03. A. Delete the first sentence of Paragraph 15.03.A in its entirety and insert the following in its place:

Upon 7 days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract or any portion of the Contract.

SC-15.04. Delete Paragraph 15.04 in its entirety.

SC-16.01. Delete Paragraph 16.01 in its entirety and insert the following in its place:

SC-16.01 Meet to Confer and Negotiate

16.01.A. Engineer's action under Paragraph 10.05.C shall become final and binding 30 days after receipt of written notice of Engineer's action or decision unless, within that time period, Owner or Contractor gives to the other party written notice of intent to submit the Claim to a process of bilateral negotiations as set forth below.

- 16.01.B. Within 30 days of the delivery of such notice, Owner and Contractor shall meet and confer regarding the Claim. A good-faith effort to negotiate resolution shall be made by both parties.
- 16.01.C. If the negotiations contemplated by Paragraph SC-16.01. B are unsuccessful, management representatives of Owner and Contractor at least one tier above the individuals who met under SC-16.01. B shall meet, confer, and negotiate within 30 days of the closure of the unsuccessful negotiations.
- 16.01.D. If the Claim is not resolved by negotiation, Engineer's action under Paragraph 10.05.C shall become final and binding 30 days after termination of the negotiations unless, within that time period, Owner or Contractor:
- 16.01.D.1. gives to the other party written notice of intent to submit the Claim to a court of competent jurisdiction; or 16.01.D.2. agrees with the other party to submit the Claim to another dispute resolution process.
- 16.01.E. Notwithstanding any applicable statute of limitations, a party giving notice under Paragraph SC-16.01. D.1 shall commence an action on the Claim within 1 year of giving such notice. Failure to do so shall result in the Claim being time-barred and Engineer's action or denial shall become final and binding.
- SC-17.05. Delete Paragraph 17.05 and insert the following in its place: 17.05. Controlling Law and Jurisdiction
 - A. This Contract is to be governed by the laws of the State of Louisiana
 - B. Contractor hereby consents and yields to the jurisdiction of the Civil District Court for the Parish of Orleans and does hereby formally waive any pleas of jurisdiction on account of residence elsewhere.

END OF SECTION

Attachment 1 - Sewerage and Water Board of New Orleans Drug - Free Workplace Policy Contractor Requirements Page 1 of 3

ATTACHMENT TO GENERAL SPECIFICATIONS STATEMENT OF POLICY

It is the policy of the Sewerage and Water Board of New Orleans that all work places associated with its operation, maintenance, improvements, and expansion be kept drug free. In order to insure this, the Sewerage and Water Board has approved the following drug testing policy to be implemented on this contract.

NOTICE

The contractor shall notify all personnel to be employed on this contract that they must submit to drug testing upon the occurrence of any accident, injury, or unsafe and hazardous incident which involves them. Agreement to submit to such drug testing shall be required for the employment of all personnel under this contract.

PENALTIES

Any employee who refuses to agree to testing under this policy or who refuses to be drug tested after the occurrence of any accident, injury or unsafe and hazardous incident which involves them, or who fails to report any such accident, injury or incident within twenty-four (24) hours of its occurrence, shall be deemed incompetent under Paragraph 47 of the General Specifications. Any employee found to have a positive test result after his conformational testing shall be deemed incompetent under Paragraph 47 of the General Specifications. Any employee deemed incompetent under these provisions shall be removed by the contractor from work under this contract and any other current Board contract.

TESTING PROCEDURE

The contractor shall while performing this contract, require any of its employees who are involved in an accident, injury or unsafe and hazardous incident while in the course and scope of their employment, whether vehicular or non-vehicular in nature, to be tested for blood alcohol or drug levels through a laboratory approved by the National Institute for Drug Abuse. Said employee shall provide a testing sample as soon as possible after such accident, injury or incident, but no longer than twenty-four (24) hours from the time of the occurrence. The contractor shall provide copies of the results of the initial testing on the samples involved to the Risk Manager of the Sewerage and Water Board of New Orleans as soon as such results are known. If the initial testing reveals a positive result, the contractor shall forward the remainder of the original testing sample to a second, conformational testing. The Sewerage and Water Board of New Orleans shall consider any result to be positive if it indicates any level which exceeds the levels set forth as follows:

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Drug-Free Workplace Policy Page 2 of 3

CUT-OFF LEVELS INDICATING POSITIVE TEST RESULTS

The following initial cut-off levels shall be used when screening specimens to determine whether negative or positive:

Marijuana metabolites	Initial Test Level (ng/ml) 50
Cocaine metabolites	300
Opiate metabolites	300
Phencyclidine (PCP, etc.)	25
Amphetamines	1000
Alcohol .05 % by weight based on grams of alcohol per 100cc of blood	
LSD	150
Barbiturates	300
Benzodiazepines	300
Quantitative GC/MS confirmation procedures at the following cut-off values shall be used for the following drugs:	
Confirmatory Test Level (ng/ml)	10
Marijuana metabolites*	
Cocaine metabolites**	150
Opiates (Morphine, Codeine)	150
Phencyclidine (PCP, etc.)	25
Amphetamines (amphetamine, Methamphetamine)	300
LSD	150
Barbiturates	300
Benzodiazepines 300 * Delta-9-Tetrahydrocannabinol - 9-Carboxylic Acid ** Benzoylecgonine	ODVDI ACE DOI ICV

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Drug-Free Workplace Policy Sheet 3 of 3

The contractor shall choose the laboratory to be used for drug testing and shall identify such laboratory to the Risk Manager of the Sewerage and Water Board prior to receiving approval to start work. All laboratories shall be approved by the National Institute for Drug Abuse.

The contractor shall notify the Board's Risk Manager immediately of the results of any conformational testing.

The Contractor's Senior Project Superintendent working in consultation and conjunction with the Board's Risk Manager and the Board's Engineer, shall determine whether an accident, injury or unsafe or hazardous incident occurred. The Safety Department of the Sewerage and Water Board reserves the right to investigate any such matter and make a complete report to the Executive Director of the Sewerage and Water Board whose decision shall be final.

The Sewerage and Water Board shall not be liable for any cause of action of any employee of the contractor brought against the contractor as a result of this policy. The Sewerage and Water Board shall not be liable for the contractor's failure to

stipulate adherence to the terms and conditions of this drug testing policy as a condition of employment of any employee on this contract. The Board shall not release the contractor from his responsibilities under the policy unless failure to

adhere to the conditions of this policy shall be a direct result of any action taken by the Board.

These requirements shall be acknowledged by signature of the contractor's authorized representative in the space provided in the "Form of Proposal".

<u>Attachment 2 - Safety Orientation Notice</u>

Welcome

We welcome you to the S&WB and request your assistance in maintaining our Safety Standards. For the safety of yourself and everyone working at the S&WB, you are asked to observe the following safety precautions. When this notice has been read thoroughly, a senior representative of your company is required to distribute this information to all employees who will be affected. You may call the Board's Risk Management Department at (504) 585-2382 if you have any questions.

Basic

- 1. Smoking will be allowed in designated areas only.
- 2. Horseplay, practical joking and fighting are positively prohibited.
- 3. The use or possession of illegal drugs or intoxicating beverages is strictly prohibited on all S&WB property.
- 4. Housekeeping is a must. We will keep our area safe and free from litter and expect you do to the same
- 5. Handrails must always be used when going up and down ladders or stairs.
- 6. When working in confined spaces, the contractor must be in full compliance with Occupational Safety and Health Administration (OSHA) Standard # 29CFR 1910.146 at all times.

Atmospheric conditions such as adequate ventilation, the presence of oxygen and the absence of explosive gases must be assured before working in voids, tanks, or other enclosed spaces.

7. Radios must be turned off.

Emergency

- 8. The S&WB Emergency Response Plan is a document, which provides specific notification instructions to be followed in case of hazardous material spills. The Board's Environmental Affairs Office phone number is 942-3855 during normal business hours 7:30 a.m. to 4:00 p.m.
- 9. The Board's 24-hour emergency lines are (504) 529-2837 and 865-0575 (Central Control Dispatcher, Carrollton Plant.)
- 10. Since Board contracts are performed under various circumstances at various locations, prior to beginning any work, the contractor should consult with the Board employee who is responsible for monitoring the contract in order to establish the most effective procedures for handling emergencies.

Transportation

Warning signals and lights shall be used as follows:

- 11. Rotating beacons shall be used if your vehicle is so equipped.
- 12. Taillights / emergency flashers shall be used.
- 13. Orange reflector type safety cones shall be placed to give other motorists warning.
- 14. If vehicle is moving, backing, or parking, proper traffic control shall be exercised.

Protective Clothing and Equipment

- 15. All personnel who are exposed to eye hazards will wear safety glasses. Hard hats will be worn at all times while an employee is in the immediate vicinity of overhead hazards or while operating heavy equipment without a Rollover Protection Device.
- 16. Protective clothing and equipment such as rubber aprons and gloves, eye and face protection, approved respirators or dust masks will be worn when handling all harmful chemicals.

Reporting

- 17. Defective equipment, machinery, hazardous conditions, or unsafe work practices or conditions shall be reported immediately to your Supervisor / Foreman who will then contact proper S&WB personnel for corrections.
- 18. All injuries will be reported to the Risk Manager, (504) 585-2422, or to the Safety Unit, (504) 585-2522, regardless of how minor an injury may seem.
- 19. S&WB employees may hold safety meetings to discuss and promote safe working conditions and accident prevention. You may be asked to attend.

Work Smart

- 20. Stay alert at all times, know what is going on around you. Know the safe operating procedures concerned with your assigned duties. When your duties may influence the safety of Board employees notify the employees and their supervisors first.
- 21. Vendor / Contractors shall at all times demonstrate strict compliance with all Federal, State and Local regulations regarding safety, including but not limited to, all relevant Department of Environmental Quality (DEQ), Department of Transportation (DOT), Environmental Protection Agency (EPA), and Occupational Safety and Health Act (OSHA) regulations.
- 22. The Vendor / Contractor will at the request of the Risk Manager and/ or Safety Manager remove any of his employees found to be creating or contributing to unsafe conditions.
- 23. The following items are not allowed on any S&WB Facility or jobsite:
- Firearms and Ammunition
- · Alcohol and illegal drugs

ATTACHMENT 3

Sewerage and Water Board of New Orleans Electrical Safety Clearance Procedure

Definitions:

Operator: The Board employee who is on-site and in responsible charge of the operation of the plant, station, or other facility.

Out of Service: The electrical/mechanical disconnection of equipment which is to remain inoperable.

Power Dispatcher: The shift employee on duty at Central Control at the time safety clearance occurs.

Signee: The person who actually tags-out equipment for safety clearance.

Supervisor/Foreman: The Board employee who is the supervisor/foreman in responsible charge of the repair/maintenance of one or more work locations which requires safety clearance. This person may not necessarily be "on-site" at any particular location.

Tag-out: The physical tagging of equipment by an operator for the purpose of disabling equipment.

Lock-out: The physical locking of equipment by an operator for the purpose of disabling equipment.

General Provisions

- 1) All equipment repair/maintenance work which is scheduled and requires safety clearance should be presented to Central Control at the beginning of each workday by the supervisor/foreman/electrical engineer in charge of the repair/maintenance. Twenty-four (24) hour advance notice of scheduled work for major outages is desirable; however, it is understood that due to the nature of the services provided by the Board this preferred notice may not be possible for every safety clearance.
- 2) In cases where two (2) or more crafts are working on, or require safety clearance on the same equipment, the supervisor/foreman/electrical engineer for each craft must follow the appropriate safety clearance procedure and the equipment must be tagged out for each craft's signee. No equipment can be tested and/or restored to service until all tags have been removed in accordance with the tag removal procedure.
- 3) When an operator requests service for equipment at an unmanned facility, i.e. an unmanned sewer station or unmanned underpass station, from either Electrical Maintenance or Mechanical Maintenance, the appropriate maintenance department shall request the responsible operator to tag-out the equipment. When the appropriate maintenance department, in the course of servicing this equipment, requires restoration of power, the appropriate maintenance department shall contact the responsible operator directly (if operator is present) or by radio or telephone (if operator is absent) and request that the responsible operator grant his permission. If the power is to be restored for only a short duration, the appropriate maintenance department shall thereafter contact the operator for permission to either remove power or restore power, as often as needed. The operator shall log each request. If the request to restore power is for a short duration only, and the operator does not receive contact from the appropriate maintenance personnel to remove power again, the operator shall make every attempt to contact the appropriate maintenance personnel in order to ensure that no accident has occurred.

- 4) If equipment must remain "Out of Service" upon completion of the on-site work, the signee must request their tag be replaced with an "Out of Service" tag in the name of their department: e.g. "Out of Service Electrical Maintenance", in addition it must be physically locked-out by that department. However, the "Out of Service" tag does not relinquish the responsibility of following the safety clearance procedure each day that piece of equipment is worked on.
- 5) Any equipment restored to service after being tagged "Out of Service" must be tested through operational test procedures. The signee must remain, when possible, on-site until testing is complete.
- 6) Any individual involved in these procedures may halt the procedure at any time if it is felt the safety of the personnel and/or equipment warrants said stoppage, or if conditions within the system change that may require postponement of the work.
- 7) In the event the responsible person, signee, leaves the job site without releasing the cleared equipment and is unreachable to release their tagout the following procedure must be enacted before the signees name, tag-out, can be removed from the cleared equipment.
 - 1) Cause must be established by the senior power dispatcher giving reason to remove the tag-out.
 - 2) Senior power dispatcher must receive orders from the Chief of Operations or higher, in his absence, to remove said tag-out.
 - 3) Concurrence given by a senior representative of the following:
 - a) Department or company to witch the signee works for.
 - b) Senior representative of the plant, station, facility in which the tagout occurs.
 - c) If job site is in the field then, inspection by Electrical Engineering assuring work has halted for the day.

Once all areas have been satisfied then the senior power dispatcher may have the signees tag-out removed.

NOTE: The above and following procedures may be deviated from above at the discretion of the power dispatcher in cases of emergency.

Safety Clearance Procedure 25 Hertz System "Non-Sewerage and Water Board Personnel"

1) The Company or responsible person representing that company shall first contact Electrical Engineering in regards to their outage request. Electrical Engineering will dispatch personnel to the job site and identify all equipment within close proximity to the work which should be cleared for safety.

NOTE: After normal working hours clearance request will be routed through Central Control who will notify the proper personnel in Electrical Engineering. It will be the responsibility of Electrical Engineering to identify said feeders.

- 2) Electrical Engineering will then contact the power dispatcher informing them of; the company, the person supervising the work, the work to be performed, and supplies the power dispatcher with a clearance list.
- 3) Electrical Engineering will then direct the company's signee to personally appear at any Board facility involved in the clearance prior to the request. Upon arrival at a Board facility the signee will contact the power dispatcher making their clearance request.
- 4) The power dispatcher reviews their one-line schematics for any additional equipment they feel is required for safety.

- 5) If the request involved equipment within a station or facility the power dispatcher then notifies the operator of the work to be performed and supplies the operator with a list of the clearance request.
- 6) The operator makes a visual inspection of the work site and adds to the clearance list any additional equipment which they note as being involved in or in close proximity to the work site. A finalized clearance list is then agreed upon by all parties involved.
- 7) The power dispatcher, with assistance from other operating personnel as required and through normal operating procedures, will disconnect from all power sources all equipment on the finalized list.
- 8) After the completion of step seven (7), with the company's signee at a Board facility, the company's signee will be notified of the disconnection of the equipment by the power dispatcher. The company's signee will request the operator at each location to place a tag-out with the company name/signee's name on each piece of equipment on the clearance list.
- 9) After receiving a tag-out report from the operators, the power dispatcher will then verify the tag-out reports against their finalized clearance list. If satisfactory, the power dispatcher will verify with the company's signee what was tagged-out. The company's signee will then be allowed to begin work.
- 10) At this point prior to the beginning of any actual work it is the responsibility of the person or persons performing the work to check the equipment with a voltage tester. If all voltage testing is satisfactory, "no voltage", work may begin.

NOTE: Due to the nature of some work it may be necessary that voltage be present.

- 11) Upon completion of the on-site work, the company's signee must report to a Board facility, involved in the clearance. At this point the company's signee will request the operator at each location to remove their tag-out with the company name/signee name off each piece of equipment. The operator and power dispatcher may restore the equipment to its connected position and test same following standard operating procedures.
- 12) If the equipment is to remain out of service, the company's signee must request their tag be removed and an appropriate "Out of Service" tag in the name of their company be placed on the equipment. The equipment will also be physically locked-out by the operator at each location, which would prevent the reconnection and testing process.
- 13) When "Out of Service" equipment is to be returned back into service, only an employee of the company which originally placed the "Out of Service" tag may request it be removed, returning said equipment into service.

Safety Clearance Procedure 60 Hertz System "Non-Sewerage and Water Board Personnel"

- 1) The company or responsible person representing that company shall first contact Electrical Engineering in regards to their outage request. Electrical Engineering will dispatch personnel to the job site and identify all equipment within close proximity to the work which should be cleared for safety.
- 2) Electrical Engineering will then contact the power dispatcher, if the work to be performed is outside of a station. The operator, if the work to be performed is inside the station. They will inform them of; the company, the person supervising the work, the work to be performed, and supplies the power dispatcher or operator with a clearance list.
- 3) The Electrical Engineering will then direct the company's signee to personally appear at any Board facility involved in the clearance prior to the request. Upon arrival at a Board facility the signee will conduct their business with the operator or power dispatcher based on the procedures listed below.
- 4) The power dispatcher reviews their one-line schematics, or the operator make a visual inspection of the work site and adds to the clearance list any additional equipment which they note as being involved in or in close proximity to the work site. A finalized clearance list is then agreed upon by all parties involved.

5) If handled through the power dispatcher:

The power dispatcher, with assistance from other operating personnel as required and through normal operating procedures, will disconnect from all power sources all equipment on the finalized clearance list.

If handled through the operator:

The operator will contact the power dispatcher informing them of the work to be performed along with a clearance list request. The power dispatcher reviews their one-line schematics for any additional equipment they feel is required for safety. A finalized clearance list is then agreed upon by all parties involved. The operator will then through normal operating procedures disconnect from all power sources all equipment on the finalized clearance list.

6) After the completion of step five (5), with the company's signee at a Board facility, the company's signee will be notified of the disconnection of equipment by the operator or power dispatcher. The company's signee will then request the operator at each location to place a tag-out with the company's name/signee name on each piece of equipment on the clearance list.

7) If handled through the operator:

The operator will then contact the power dispatcher providing then with a tag-out report for logging purposes.

8) At this point prior to the beginning of any actual work it is the responsibility of the person or persons performing the work to check the equipment with a voltage tester. If all voltage testing is satisfactory, "no voltage", work may begin.

NOTE: Due to the nature of some work it may be necessary that voltage be present.

- 9) Upon completion of the on-site work, the company's signee must report to a Board facility involved in the clearance. At this point the company's signee will request the operator at each location to remove their tagout with the company's name/signee name off each piece of equipment. The operator and/or power dispatcher may restore the equipment to its connected position and test same following standard operating procedures.
- 10) If the equipment is to remain out of service the company's signee must request their tag be removed and an appropriate "Out of Service" tag in the name of their company be placed on the equipment. The equipment will also be physically locked-out by the operator at each location, which would prevent the reconnecting and testing process.
- 11) When "Out of Service" equipment is to be returned back into service, only an employee of the company which originally placed the "Out of Service" tag may request it be removed, returning said equipment into service.

ATTACHMENT 4 SEWERAGE and WATER BOARD of NEW ORLEANS

Storm Water Pollution Prevention Plan (SWPPP) And Storm Water Best Management Practices (BMP) Requirements

GENERAL

- 1. The contractor shall prepare and maintain a Storm Water Pollution Prevention Plan (SWPPP), which describes in specific details the Contractor's program to prevent contamination of the storm water collection system for this project. A suggested SWPPP Templates and Sample Inspection Report, as well as other valuable information can be found at EPA's website http://cfpub.epa.gov/npdes/stormwater/swppp .cfm.
- 2. Contractor shall implement, maintain, inspect and remove all erosion and sediment controls identified in the SWPPP. The program shall address both common construction activities and extraordinary events.
- 3. Contractor shall include Water Pollution Control Drawings (WPCD) in the SWPPP to illustrate the locations, applications and deployment of Best Management Practices (BMPs) identified in the SWPPP. The WPCDs shall be included as an attachment to the SWPCP.

- 4. Best Management Practices (BMPs): A Best Management Practice is a technique, process, activity, or structure used to reduce the pollutant content of a storm water or non-storm water discharge. BMPs may include simple, non-structural methods such as good housekeeping, staff training, and preventive maintenance. Additionally, BMPs may include structural modifications such as the installation of berms, canopies or treatment control
- 5. The Contractor shall comply with laws, rules, and regulations of the State of Louisiana and agencies of the United States Government prohibiting the pollution of lakes, wetlands, streams, or river waters from the dumping of contaminates, refuse, rubbish or debris.
- 6. The contractor shall submit six (6) copies of the SWPPP, a minimum of 10 working days prior to beginning construction, to the Engineer. **Construction shall not begin until the SWPPP is approved.** Contractor shall update the SWPPP as necessary during the work to prevent contamination of the storm water collection system.
- 7. Before start of work, Contractor shall train all employees and subcontractors on the approved SWPPP and related WPCD and provide the Sewerage and Water Board with written documentation of said training.
- 8. Suggested BMPs can be obtained from Ella Barbe, LA DEQ Small Business Assistance Program, 201 Evans Rd. Bldg. 4, Suite 420 Harahan LA. Phone 504-736-7739, e-mail: ella.barbe@la.gov

CONSTRUCTION

The contractor shall keep a copy of the SWPPP on the job site. The contractor shall provide continuously at the jobsite all the tools, equipment, and materials necessary to implement the SWPPP at all times from project initiation through completion, including any punchlist or warranty work on the project. At a minimum the following requirements shall be met as applicable, to the maximum extent practicable, at construction sites:

- Storm Drain System Protection: At the first order of work, the Contractor shall protect the existing storm drain system from entrance of construction debris and pollutants. Such protection shall include implementing the BMPs as outlined in the SWPPP. Protection shall prohibit the discharge of untreated runoff from temporary or permanent street maintenance/landscape maintenance material and waste storage areas from entering the storm drain system. Sediment that is generated on the project site shall be retained using structural drainage controls. In addition, the protection system shall have a minimum of three features: 1) a particulate filter of geosynthetic material securely fastened in place such that it cannot be bypassed without significant physical damage; 2) a prefilter for the particulate filter; and 3) on-hand materials to close off the inlet or opening in the case of a significant pollution spill. Contractor shall monitor and maintain all storm drain inlet protection devices during rain events to prevent flooding.
- 2. Material Management & Storage: No construction-related materials, wastes, spills or residues shall be discharged from the project site to streets, drainage facilities or adjacent properties by wind or runoff. All materials and/or equipment storage areas where liquid construction materials are placed shall be protected by a physical barrier capable of containing the entire volume of stored liquid materials. During active construction activities, portions of the barrier may be removed for access. However, the barrier materials must be readily accessible for replacement by onsite construction personnel. The barrier must be in place at all times during the absence of Contractor personnel at the storage site. Building materials shall be placed on pallets and covered in event of rain. Do not store materials in the street or gutter area.
- 3. Equipment & Vehicle Maintenance: Non-storm water runoff from equipment and vehicle washing and any other activity shall be contained at the project site and shall not be allowed to discharge from the project site to streets, drainage facilities or adjacent properties by wind or runoff. The Contractor shall inspect vehicles and equipment on each day of use. Leaks shall be repaired off-site if possible. If necessary to repair on site, the runoff must be contained or the problem vehicle or equipment shall be removed from the project site until repaired. If necessary, drip pans shall be placed under the vehicles or equipment while not in use to catch and/or contain drips and leaks.
- 4. BMP Inspection: The contractor shall inspect all pollution control BMPs regularly. The Contractor shall also repair/replace any damaged or clogged element on a daily basis. During periods of precipitation where any runoff occurs, the system shall be checked twice a day, seven days a week, whether or not any work has been performed. The daily checks shall be between 6 a.m. and 9 a.m., and 4 p.m. to 8 p.m. The contractor shall keep a monitoring inspection log of each inspection.
- Spill Prevention & Cleanup Plan: Contractor shall have a spill prevention plan and spill cleanup materials readily available and addressed in the SWPPP. Spills shall be cleaned

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up immediately using dry methods if possible. Spill cleanup material shall be properly disposed off site. Contractor shall keep a record of any spills in the inspection log. In addition, at the end of the project, the Contractor must certify that all contaminated materials have been properly disposed in accordance with the SWPPP.

- 6. Asphalt & Concrete Activities: Asphalt and concrete activities shall be scheduled for dry weather. Contractor shall prohibit saw cutting during a storm event of 0.25 inches or greater. Store bags of cement away from gutters and storm drains, sealed and covered, protected from rainfall runoff and wind. Place tarp under cement mixer before operating to catch spills. Never dispose of cement washout or concrete dust onto driveways, streets, gutters or storm drains.
- Sidewalk Washing: The following methods should be utilized to prevent discharge of sidewalk cleaning wastewater into the storm drain system:
 - a. Sweep and pick up all areas to be cleaned before using water.
 - b. Manually scrape gum from sidewalks and other surfaces.
 - c. Must use high pressure and low volume of water with no additives and at an average usage of 0.006 gallons per square foot of surface area to be rinsed.
 - d. Use a wet/dry vacuum to collect wash water for disposal. Large volumes of wash water may require the use of a small sump pump to remove wash water from the iob site.
 - e. One or more of the following methods are recommended to prevent pollutants from entering the storm drain system:
 - Sandbags can be used to create a barrier around storm drains.*
 - Rubber mats or plugs can be used to seal drain openings. *
 - Temporary berms or containment pads help keep water on site. *
 - Use berms of sandbags to direct wash water to landscaping.
 - Use large squeegees to accumulate sheet flow for collection.
 - * Remember to remove plugs, berms, and sandbags or you may be liable for possible flooding.
 - f. Wash water that may contain hazardous waste such as oil-saturated absorbents, water with lead or other heavy metals from oxidized paint, and solvent cleaners requires special treatment and must be disposed of through a hazardous waste facility.
- Employee BMP Training: Contractor shall train employees and subcontractors on BMP implementation, general good housekeeping, and proper spill containment and cleanup. Before start of work, Contractor shall provide the Board with written documentation of training and keep all documentation in the SWPCP.
- Inspection: Contractor shall inspect and repair or replace, as needed, all job site BMPs a minimum of:
 - Biweekly
 - Before, during and after a major rain event.
 Contractor shall document the inspections in the SWPPP.
- Dewatering: Avoid dewatering discharges where possible by using the water for dust control, infiltration, etc..

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ATTACHMENT 5 WAGE RATES

The contractor shall abide by the Davis-Bacon Act Wage Decision. The Wage Decisions applicable to SWB Construction may be Heavy Industrial (LA20190008 - 8/16/2019) and Building (LA20190041 - 7/26/19).

Please use the applicable wage rates at http://www.wdol.gov/dba.aspx

TECHNICAL SPECIFICATIONS

FOR CONTRACT 2158

WATER MAIN POINT REPAIRS, WATER SERVICE CONNECTION, WATER VALVE AND FIRE HYDRANT REPLACEMENT AT VARIOUS SITES THROUGHOUT ORLEANS PARISH

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TECHNICAL SPECIFICATIONS

FOR CONTRACT 2158

WATER MAIN POINT REPAIRS, WATER SERVICE CONNECTION, WATER VALVE AND FIRE HYDRANT REPLACEMENT AT VARIOUS SITES THROUGHOUT ORLEANS PARISH

SECTION 1

CONTRACT DOCUMENTS AND SPECIAL CONTRACT SPECIFICATIONS

1-01 CONTRACT DOCUMENTS

The Contract Documents governing this Contract 2158 consist of the following papers, which are bound together under one cover, namely:

Advertisement and Description of Contract 2158;

CONTRACT AND BOND:

Section "A" of the General Specifications: Including Information for Bidders and General Provisions;

- * Section B of the General Specifications, covering general matters pertaining to construction;
- * Section C of the General Specifications, covering materials;

These Special Specifications for Contract 2158 including the Form of Proposal, also

The Drawings listed in the Advertisement and Description and Paragraph 1-03;

These drawings are not bound with the other contract documents.

The Sewerage and Water Board has discontinued the policy of issuing the "applicable sections" of the General Specifications with each contract specification. In implementing this system, each prospective Bidder is given a complete set of the "General Specifications", without charge, with the first set of contractual drawings and bid data the Bidder receives. If the Bidder has previously received a complimentary set, the Bidder will not be entitled to additional sets without cost. This set of specifications is for the Bidder's use on this Contract, and future Board Contracts. Additional copies are available to all at the office of the Purchasing Agent at a cost of \$5.00 per copy. Holders of the "General Specifications" will be kept informed of any changes that may occur.

1-02 EXTENT OF CONTRACT

- A. The work to be performed under this contract consists of furnishing all labor, materials, supervision, construction equipment, tools, appurtenances, mechanical equipment, electrical equipment, travel, utilities, transportation, and supplies, all as necessary and required to perform water point repairs, water service connection, water valve and fire hydrant replacement by at scattered sites throughout the City of New Orleans and for the performance of all work as specified in these contract documents and as shown on the accompanying drawings, on the referenced drawings, and whatever work may be added as extra work under the provisions stated in Paragraphs No. 21, 22 and 31 in Section "A" of the General Specifications.
- B. This contract shall also include the excavation, demolition, backfilling, replacement, and repair to condition existing prior to disturbance by the Contractor, of all bridges, ditches, drains, culverts, curbs, fences, sidewalks, pavements or other structures or obstacles the removal of which is necessary for the execution of this contract.
- C. Provide all items, articles, materials, equipment, etc., mentioned herein or scheduled or shown on the drawings, and all labor, workmanship, tools, appliances, etc., required for the proper installation thereof, to accomplish the intention. In

general, this Contract shall provide any item of labor or material which is obviously necessary for a completed system to accomplish the intention, whether specifically mentioned or not.

- D. This contract includes, but is not limited to the following items of work:
 - 1. Removal and disposal of roadways, driveways, sidewalks, trees or unpaved surface areas.
 - 2. Safe excavation to repair water mains.
 - 3. Removal and replacement of existing water valves and fire hydrants and tie-in of newly laid valves and hydrants to water system.
 - 4. Removal, replacement and tie-in of water house connections, from the main to property.
 - 5. Restoration of roadways, driveways, sidewalks or unpaved areas.

1-03 CONTRACT DRAWINGS

The Sewerage and Water Board Standard Drawings attached as **Appendix A** governing the work which will be performed under this Contract **2158** are the following:

3143-E1	Details of Sewer and Water Manhole Castings	
7134	Water Meter Service Connection New Orleans Fixed Box	
7332-W	1 1/2"-2" Meter Service Connection	
6179-F-2	Hydrant Settings, Details of Valve Box, Details of Manhole Ove 12" Valve and Frame and Cover	
6178-B6	Typical Brick and Pre-Cast Concrete Manholes, Castings and Steps	

At the request of Contractor, a sketch of the sewer and water facilities will be provided.

1-04 UNIT PRICES

Unless otherwise designated the bid prices named in the proposal shall be on a unit basis. The quantities contained in this proposal are approximate and are provided only as a means for comparison of bids. While the board has estimated, to the best of its knowledge, the quantities that will be required, the actual quantities could vary substantially.

The bid prices named for the items shall be for furnishing all materials, equipment, labor, supervision, construction equipment, tools, appurtenances, mechanical equipment, electrical equipment, travel, utilities, transportation, and supplies, all as necessary and required to perform water point repairs, water service connection, water valve and fire hydrant replacement by excavation at specific locations as identified on the "Work Order." The cost of any item requiring excavation is to include a temporary roadway surface of stone and maintenance of the roadway surface until final restoration is complete. There will be no additional pay in the event that hand digging is required because of obstructions, even if the entire repair must be done by hand.

1-05 PROPOSAL FORM

All proposals must be submitted **upon the bid form embodied in Section 8 of these special specifications and <u>must not</u> be detached from same**. Failure to comply with these requirements shall result in a bid being deemed nonresponsive. All blank spaces in the Proposal shall be filled. A bid price shall be indicated for each bid item. Bids received without all such items completed will be considered non-responsive.

The bid shall contain an acknowledgment of receipt of all Addenda, which shall be bound to the Bidder's Contract Specifications to form a complete document. Erasures or any changes in the Bid Prices; must be initialed by the Bidder.

ONLY BIDS WRITTEN IN INK OR TYPEWRITTEN AND PROPERLY SIGNED BY A MEMBER OF NOTE:

THE FIRM OR AUTHORIZED REPRESENTATIVE WILL BE ACCEPTED. PENCIL FIGURES OR

PENCIL SIGNATURES WILL DISQUALIFY BIDDERS.

Where a conflict exists between the written price and the price in figures, the written price will take precedence in evaluating bids. The totals provided in the proposal are subject to verification by the Sewerage and Water Board. In case of discrepancy between the unit price and the total shown by the bidder, the unit price shall take precedence and the totals will be adjusted accordingly.

1-06 **BID EVALUATION**

- A. Bids will be evaluated based on the sum total of the products of the bid item prices and the estimated quantities.
- B. Bidders shall provide prices, where required in the Proposal Section, for all work. Any bids received without prices submitted for all required items will be rejected and will not be considered.
- C. If two or more proposals are received equal in amount and lower than any other proposal, the Sewerage and Water Board reserves the right to evaluate these proposals and to decide which proposal will be accepted. Preference will be given to home contractors, all conditions being equal.

1-07 COMPLETION TIME AND RENEWAL OPTION

- A. The work of this contract shall be completed in all respects and tendered to the Board for acceptance within 365 calendar days from the date of the "Work Order".
- B. The work performed within the time frame stated above shall also include repair of damages to public or private property, complete cleanup of the premises, and completion of all punch list items generated by the Engineer's final inspection.
- C. The term of the contract shall be one (1) year. At the option of the Sewerage and Water Board, and with the concurrence of the Contractor, this contract may be renewed for one additional year. The renewal option is for a period of one (1) year with all terms, conditions and prices of the original specifications remaining unchanged during the renewal term. The agreement for renewal must be executed ninety days (90) prior to Contract termination.

1-08 LOCATION OF WORK

The location of the work site will be at scattered locations throughout Orleans Parish. It is mandatory that all prospective bidders acquaint themselves with the local conditions.

OTHER CONTRACTORS 1-09

Other Contractors and Sewerage and Water Board personnel may be working in the vicinity of the job site during the execution of this contract.

The Contractor shall cooperate with other Contractors and/or Sewerage and Water Board workmen in the area and shall organize his work so as not to interfere with or delay in any way, the work of the other Contractors and/or Sewerage and Water Board workmen.

The Engineer reserves the right (should it be the best interest of the Board) to arbitrate questions of conflict between Contractors and/or between Contractors and Sewerage and Water Board workmen and his decision shall be final.

1-10 SITE STORAGE

Storage area around construction sites is limited. The Contractor shall adjust delivery of materials and equipment to suit the limited storage area.

1-11.1 PRE-BID CONFERENCE

A mandatory pre-bid conference will be held A mandatory pre-bid conference will be held on **January 13, 2022 at 10:30 a.m. via Microsoft Teams as follows: Join on your computer or mobile app**

Click here to join the meeting

Or call in (audio only)

<u>+1 504-224-8698,,369073207#</u> United States, New Orleans

Phone Conference ID: 369 073 207#

Bidders must attend this meeting. Bidders failing to attend this pre-bid conference will be considered as non-responsive to this Advertisement.

1-12 MOBILIZATION

A. **DESCRIPTION**: This work consists of preparatory work and operations, including, but not limited to, those necessary for the movement of personnel, equipment, supplies and incidentals to the project site; the establishment of all offices, buildings and other facilities necessary for work on the project and the costs of bonds and any required insurance, and any other pre-construction expense necessary for the start of the work, excluding the cost of construction materials.

Contract 2143 does not include a pay item for mobilization.

B. BASIS OF PAYMENT

- 1. When the contract does not include a pay item for mobilization, all pre-construction expenses incurred by the contractor in connection with mobilization will be considered incidental to the work and no direct pay will be made, therefore.
- 2. When the contract contains a pay item for mobilization, payment will be made at the contract lump sum price, subject to the following provisions.

Partial payments for mobilization will be made in accordance with the following schedule up to a maximum of 10 percent of the original total contract amount, including this item, and payment of any remaining amount will be made upon completion of all work under the contract.

Percent of Total Contract Amount Earned	Allowable Percent of the Lump Sum Price for the Item
1st Partial Estimate	25
10	50
25	75
50	100

No price adjustments will be made for this item due to additions and/or changes in the work; and any increased mobilization costs incurred by the contractor due to additional work occasioned by such changes will be considered incidental to the additional work.

If the contract is canceled by the S&WB, the contractor will be paid for the actual cost incurred for mobilization at the time of cancellation, which cost will not exceed the total amount bid under the mobilization item, or 10 percent of the original Contract bid total.

Nothing herein shall be construed to limit or preclude partial payments otherwise provided by the contract.

1-13 TRAFFIC MAINTENANCE

- A. Unless directed by the Engineer, the Contractor shall maintain fifty (50%) percent of the roadway accessible to vehicular traffic at all times, and for major streets shall maintain 100% of roadway accessible to vehicular traffic between the hours of 7-9 A.M. and 4-6 P.M. A traffic control plan indicating, in detail, the location of all signs, lights, and barricades must be prepared by the Contractor for the written approval of the City of New Orleans Department of Street's Traffic Engineer, not less than two, or more than ten working days in advance of implementation. It shall be the Contractor's responsibility to obtain these approvals. There is no direct pay for a requirement of traffic control plan, devices and installation. It is included in the prices bid in the proposal.
- B. The Police Department, Fire Department, all affected utilities as well as any and all residents and/or businesses affected must be informed a minimum of twenty-four (24) hours in advance of anticipated closures and the duration thereof.
- C. Construction traffic control signs, barricades, warning lights, devices, and methods, shall comply with Part VI of Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) unless otherwise directed by the Traffic Engineering Division of the City of New Orleans Department of Streets.
- D. All traffic control devices (roadway markings, signs, signals, signal controls, etc.) destroyed as a result of construction shall be replaced per City of New Orleans specifications at no cost to the Sewerage and Water Board.
- E. The Contractor shall notify the City of New Orleans Traffic Engineer, at least 3 working days prior to start of construction if the project requires changes or modifications to existing traffic control signs, parking meters, etc.

1-14 LOUISIANA REVISED STATUTE 9:2716

Any contract between the Sewerage and Water Board of New Orleans and a person or entity entered into as a result of fraud, bribery, corruption, or other criminal acts, for which a final conviction has been obtained, shall be absolutely null and shall be void and unenforceable as contrary to public policy.

Any person whose conviction causes the nullity of the contract as provided shall be responsible for payment of all costs, attorneys' fees, and damages incurred in the re-bidding of the contract.

1-15 DOMESTIC MANUFACTURE

All material furnished as specified herein, shall be of domestic produce, manufacture and assembly, i.e., manufactured and assembled within the limits of the United States. The Board reserves the right to waive this requirement if, in the opinion of the Engineer, it appears to be in the best interests of the Board.

1-16 CITY AND STATE SALES TAXES

The Contractor shall pay applicable state and local sales and use taxes for purchase of materials and supplies furnished under this contract. Such taxes shall be included in the lump sum bid for the work of this contract. The board shall be relieved of any obligation to pay these taxes.

END OF SECTION 1

SECTION 2

SUPPLEMENTAL SPECIAL CONTRACT PROVISIONS

2-1 BIDDERS TO EXAMINE LOCATON AND PLANS

- A. Each Bidder shall make a personal examination of the location of the proposed work and of the surrounding area. The Bidders shall thoroughly acquaint themselves with the details of the work to be done and all the conditions and obstacles likely to be encountered, including soil conditions, in the performance and completion of work. Bidders shall inform themselves as to the facilities for the transportation, handling and storage of equipment and materials.
- B. Each bidder shall carefully study the plans, specifications and other contract documents and thoroughly educate themselves as to the conditions under which the work is to be done, and as to the character, qualities and quantities of work to be performed, and materials to be furnished, and be prepared to execute a finished job in every particular.
- C. No extra charge will be accepted except as may be specifically provided for elsewhere in these Contract Documents.
- D. Contractors shall comply with Sewerage & Water Board of New Orleans Storm Water Prevention Plans (SWPPP) and Storm Water Best Management Practices (BMP) Requirements as detailed in Attachment (Section 2-Attachment 1)

2-2 BIDDERS QUALIFICATIONS

Bidders shall be known to be skilled and reputable Contractors qualified to do the type of work described by the Contract Documents. Proposals from others will not be considered. These qualifications shall be in addition to those required by the Louisiana State Licensing Board for Contractors under LA-R.S. 37:2150 through 37:2163, as amended.

2-3 PROPOSALS FROM LICENSED CONTRACTORS

Proposals will be received from only those Contractors who are licensed by the Louisiana State Licensing Board for Contractors under Louisiana Revised Statutes 37:2150 through 37:2163 as amended and are qualified under the provisions of the said act to perform the work called for in these specifications. Any bid in the amount of \$50,000.00 or more that does NOT show the Contractor's license number on the bid envelope will be automatically rejected, and will be returned to the bidder stamped "REJECTED" and will NOT be read aloud at the public bid opening.

2-4 EXECUTION, CORRELATION AND INTENT OF DOCUMENTS

It is understood that except as otherwise specially stated in the Contract Documents, the Contractor shall provide and pay for all materials, labor, tools, equipment, light, power, transportation, superintendence, temporary construction of every nature, and all other services and facilities of every nature whatsoever necessary to execute, complete, and deliver within the specified time.

2-5 ORGANIZATION OF SPECIFICATIONS

The Specifications are separated into sections for convenience of reference. These separations do not establish limits to the Contract between the Contractor and Subcontractors or between Subcontractors.

2-6 INFORMATION AND CLARIFICATION FOR PROSPECTIVE BIDDERS

Prospective bidders may obtain clarification regarding questions arising from the interpretation of the Contract Documents by contacting the Sewerage and Water Board Purchasing Agent, Room 133, 625 St. Joseph Street, New Orleans, LA, 70165, (504) 585-2124.

2-7 AWARD AND SIGNING OF CONTRACT

A. The proposal submitted by the lowest bidder will be tentatively selected by the Sewerage and Water Board at its next scheduled Finance Committee meeting of the Board after the date of opening bids provided that the lowest proposal is acceptable to the Sewerage and Water Board. The final award of the contract will be made at the subsequent Board

- meeting. All prices bid must be held firm for 120 days or until final award of contract by the Board. The Board reserves the right to reject any one or all bids for just cause and to waive informalities in Bidding.
- B. After submittal of required Insurance and Bonds, in form acceptable to the Sewerage and Water Board, the selected Bidder will be authorized by the Executive Director of the Board to appear before the Notary for the Sewerage and Water Board of New Orleans to sign the contract within ten (10) consecutive calendar days from the date of the notice.

2-8 ORDER TO START WORK AND COMPLETION OF WORK

- A. Sometime after the contract has been signed, the Engineer will issue a "Work Order" directing the Contractor to start work at a point or points designated within 25 calendar days after the date of the "Work Order". The "Work Order" shall be the Contractor's authority to purchase materials for use on this contract; materials ordered by the Contractor before the "Work Order" has been issued are ordered at his own risk and the Board has no obligation concerning them.
- B. The Contract shall be completed in every respect, including the repair of all damaged public or private property resulting from the work of this contract, within the specified number of calendar days.

2-9 LIQUIDATED DAMAGES FOR FAILURE TO START OR COMPLETE ON TIME

- A. The Contractor shall pay to the Board the sum of \$500.00 liquidated damages for each calendar day beyond the times specified should the Contractor fail to commence or start the work within the time allotted or fail to complete individual phases of the work within the times allotted for said individual phases.
- B. The Board shall retain the amount of such damages from any money due or to become due the Contractor under this contract without the necessity of the Board putting the Contractor or his Surety, either or both, in default.
- B. Special notice is hereby given to all Contractors that the terms stipulated in Paragraph 26 of Section A-1 of the General Specifications, titled "FAILURE TO START, FAILURE TO COMPLETE" as well as the liquidated damages specified in the above subparagraphs will be strictly interpreted and rigidly enforced.

2-10 BEFORE STARTING CONSTRUCTION

A. Before undertaking each part of the work, the Contractor shall carefully study and compare the contract documents and check and verify pertinent figures shown thereon including all pertinent field measurements. Contractor shall promptly report in writing to the Engineer any conflict, error or discrepancy that the Contractor may discover.

B.Prior to commencement of work under this Contract or the continuance of any work hereunder or under any modification to the Contract Documents, Contractor shall provide written notice to the Engineer of any defects in the plans and specifications and the specific engineering reasons thereof, and of any prospective damages to persons or property that could be or would be caused by the work and/or duties to be performed under this contract.

C. Prior to beginning the work, Contractor shall submit to the Engineer an estimated progress schedule indicating the starting and completion dates of the various stages of the work, a preliminary schedule of Shop Drawing submissions and a preliminary schedule of values of the work.

2-11 PRECONSTRUCTION CONFERENCE

- A. After the time specified in the Notice to Proceed, or as agreed by the parties, but before Contractor starts any portion of the work at the site, a conference will be held for review and acceptance of the schedules referred to in Section 2-10, to establish procedures for handling Shop Drawings and other submittals, securing of Permits, and for processing applications for payment, and to establish a working understanding among the parties as to the work, protection of existing facilities, conflicts with other utilities or owners, and other pertinent items associated with the Contract.
- B. Conference shall be attended by the Board Engineer, the Contractor and his jobsite Superintendent, principal

Subcontractors, representatives of principal suppliers as deemed necessary and appropriate, the Design Engineer and his Project Manager and others as deemed advisable by the Contractor, the Board or the Design Engineer.

2-12 PERMITS AND CERTIFICATES

- A. Before commencing work, the Contractor shall obtain at his own expense any permits from the City of New Orleans, Building Inspection Division that are necessary. The Contractor shall also secure at his own expense any necessary inspection certificates required after the work is done.
- B. Evidence of compliance shall be furnished to the Board prior to starting work in the case of permits or within 10 calendar days after completion of that work requiring inspection certificates.

2-13 GENERAL SPECIFICATIONS AND THEIR APPLICATION

The fact that certain paragraphs of the General Specifications have been specified as applying to this contract does not in any way imply that paragraphs not quoted do not apply; in all cases where the General Specifications are not directly contradicted by these Special Specifications, the General Specifications shall have full force and effect; nor shall the fact that certain clauses of the General Specifications refer to operations not constituting a part of the work of this contract be construed as in any way weakening the binding force of the General Specifications in the remaining clauses.

2-14 CONFLICT BETWEEN THE GENERAL AND SPECIAL SPECIFICATIONS

In case of any conflict between the "General Specifications" herein, and these "Special Specifications", the latter shall govern.

2-15 CONFLICT BETWEEN DRAWINGS AND/OR SPECIFICATIONS

- A. In case of the conflict between the bid documents (drawings and the specifications), the Engineer shall be the sole authority in determining which of the two shall take precedence in the Contract Documents. Such conflict shall not be a basis for an extra expense to the Board.
- B. The Contractor is hereby cautioned to base his price and work upon the more costly item in event of conflicts, which may exist within either the specifications or the contract drawings, and no claim for extra expense will be entertained on this basis.

2-16 CONTRACT DRAWINGS AND SPECIFICATIONS FROM THE BOARD

- A. The Engineer will furnish to the Contractor free of charge, one (1) set of specifications and one (1) set of reproducible drawings for the Contractor's use. Reproduction costs shall be borne by the contractor. The Engineer will also furnish ten (10) copies of any revised drawings.
- B. The work shall be executed in strict conformity with the contract specifications, and the Contractor shall do no work without proper instructions.
- C. Contract drawings are descriptive of the work to be performed and are to be used for General Guidance only. Contractor shall take and verify all measurements and dimensions in the field. Do not scale. Contractor shall assume all responsibility for failure to take proper and accurate measurements.
- D. These plans and specifications shall be considered to be complimentary, one to the other, and work indicated in/on one shall be as binding as if indicated in both. Discrepancies between drawings and specifications or any clarifications deemed necessary shall be brought to the attention of the Engineer prior to the submission of a bonafide bid. Submission of a bonafide bid indicates that the Contractor has been adequately informed on all phases of the work and that he can and will perform in accordance with these plans and specifications.
- E. All equipment shall be installed in accordance with the manufacturer's recommendation and any conflicting data shall be verified before bids.

F. After award of contract, the Engineer's interpretation of these documents shall be final.

2-17 CHANGES

- A. Minor changes or additions to the contract (defined as those changes or additions which do not change the total cost of the contract or those which do not increase or decrease the total cost of the contract by an amount exceeding 5% of the base bid of the original contract) may be made by the Engineer upon written notice to the Contractor.
- B. Changes of greater extent or value may be made only by resolution of the Board, when such changes are deemed necessary or desirable to improve the quality or efficiency of the work, or to make these specifications operative, or to facilitate the Contractor without injury to the interests of the Board. Any work done by the Contractor without such resolution is done at his own risk, and the Board assumes no responsibility therefore.
- C. No notice of such change shall be required to be made to the Contractor's Surety and neither the Contractor nor his Surety shall be, in any manner, relieved of any obligation which they have assumed under this contract by or through such change or changes as may be made.
- D. Increase or Diminution of Quantities:

The Board reserves the right to alter the quantities of work included in this Contract as may be found to be necessary or desirable. Such increases decreases and/or other alterations shall not invalidate the Contract nor release the Surety and the Contractor. The Contractor agrees to accept the work as altered, the same as if it had been part of the original Contract. No claims shall be made by the Contractor for any loss of anticipated profits because of any such alteration, nor shall such alteration be considered as waiving or invalidating any conditions or provisions of the Contract.

2-18 PAYMENTS

- A. Payments for work to be done under this contract will be made by the Board in accordance with Paragraphs (55) through (58) of Section A-1 of the General Specifications.
- B. Initial payment to the Contractor will be predicated upon his compliance with Paragraph 2-10 of these specifications relative to securing of all necessary permits.
- C. Credits to be allowed the Board by the Contractor for work abandoned or not to be done shall be calculated on the same basis as "Extra work".
- D. Payments for extra work, whether unit price work, lump sum work, or force account work will be made and retainers will be withheld on items of extra work in the same manner as on the items bid on the original proposal.
- E. Retainer: "The percentage of the value of the work done..." which will be retained by the Board as referred to Paragraph (60) of Section A-1 of the General Specifications is defined as follows:
 - 1. On contracts that are priced \$500,000.00 or more, the Board shall withhold 5% of the total amount earned, as billed, until the contract is finally accepted, and a clear Lien and Privilege Certificate is submitted. Payment for material stored shall be made at 90% of the paid invoice value and 5% retainage will be withheld from this amount.
 - 2. On contracts priced less than \$500,000.00, the Board shall withhold 10% retainage.

2-19 PAYMENT FOR MATERIAL DELIVERED TO JOB SITE

The Board may make allowance for material delivered to the job site but not yet used in construction, in accordance with Paragraph 58 of Section A-1 of the General Specifications, provided that conditions of security and areas for storage on the jobsite are judged suitable by the Engineer to adequately protect the interest of the Board. The allowance will be in the form of advanced payment for the material, as defined in Paragraph 58. Ninety (90%) percent of the value of the materials as delivered, as represented by invoices, will be included in the estimate. The amount of the retainer will then be subtracted from the total estimate (composed of the work done plus 90% of the invoice price of the material).

2-20 CONTRACTOR'S PLANS, SAMPLES, AND DATA

- A. The Contractor shall submit for approval, with such promptness as to cause no delay in this work or that of the Board, six (6) copies each of all shop, assembly, or erection drawings and lists of material and equipment for erection, together with other information in such detail as to permit the Engineer to judge whether the proposed material, equipment, or arrangement will meet the requirements of the drawings and specifications. The Engineer will return two (2) annotated copies of each drawing to the Contractor. When the drawings have received final approval, the Contractor shall forward two (2) copies of each to the Engineer for his files.
- B. All submittals, regardless of origin, shall be stamped with the approval of the Contractor and identified with the name and number of the contract, Contractor's name, and references to applicable specifications paragraphs and contract drawings. Each submittal shall indicate the intended use of the item in the work. When catalog pages are submitted, applicable items shall be clearly identified. The current revision, issue number, and date shall be indicated on all drawings and other descriptive data.
- C. The Contractor shall accept full responsibility for the completeness of each submission and shall verify that all exceptions previously noted by the Engineer have been taken into account.
- D. The Engineer shall be allowed 28 working days to process the above listed drawings, lists and diagrams. The Engineer's approval shall not relieve the Contractor of responsibility for correctness of his submittals. The Contractor shall bear any costs or expense incurred to revise or replace material or equipment, furnished in accordance with his submittals, so as to bring the work into conformance with the drawings and specifications.
- E. Any need for more than one resubmission, or any other delay in obtaining the Engineer's review of submittals, will not entitle the Contractor to extension of contract time unless delay of the work is directly caused by a change in the work authorized by a Change Order or by failure of the Engineer to return any submittal within 28 working days after its receipt in the Engineer's office.

NOTE: The fact that the Contractor furnishes on the job items that are listed in the specifications and not a substitution does not relieve the Contractor from furnishing submittals to the Engineer as stated in the preceding paragraphs.

F. The contract documents are prepared to establish the intent of the required construction. Approval of submittals, which may be based upon items different from that specified and/or shown on the plans and specification, shall NOT relieve the contractor of all costs necessary and proper to make the items fit and function in accordance with the evident intend, all as judged by the Engineer.

2-21 SUBSTITUTE MATERIALS AND EQUIPMENT

All materials and/or equipment indicated on contract plans and/or included in specifications by Manufacturer's Name, Catalog or Model Number has been selected to establish a standard for quality and/or function. If the Contractor wishes to substitute Material and/or Equipment of another Manufacturer because of availability or as "an equal" he shall, after signing of contract, comply with the following:

- A. Such Materials and/or Equipment must be submitted for Engineer's approval within forty-five (45) consecutive days after signing of contract and thereafter approved as "Equal" by the Engineer.
- B. If Contractor fails to submit the Materials and/or Equipment substitutions within forty-five (45) days limit or if any one of the Materials and/or Equipment submitted within specified period is not approved by the Engineer, then only Materials and/or Equipment specified in the Contract Documents will be accepted.
- C. The term "Equal" used herein is defined as meaning "Equal", in the opinion of the Board Engineer, with regard to quality, fit, finish, and utility.
- D. No more than one submittal of a Material and/or Equipment substitute for each item of Material and/or Equipment indicated on drawings and/or included in specifications will be reviewed for approval by the Board Engineer.

2-22 PRIOR APPROVAL

All bids must be based upon the specified items. If the Contractor wishes to substitute "or equal" prior to the bid opening, he shall be responsible for the substitution's equality to the item(s) specified. The Board will entertain prior approval of substitutions up to 14 working days before bid opening. The Board reserves the right to evaluate the equality of the substitute item(s) and its decision regarding the acceptability of the item(s) will be final.

2-23 CODES AND STANDARDS

Wherever in the Contract Documents references are made to NEC, NESC, AWWA, ASTM, ANSI, NEMA or any other standards or requirements, it shall be understood that the most current issues of the standards or requirements of the National Electrical Code, National Electrical Safety Code, American Water Works Association, American Society for Testing and Materials, American National Standards Institute, National Electrical Manufacturers Association, etc., are intended and shall apply, except where specific dates are specified and except to the extent that the standards or requirements may be in conflict with applicable laws, regulations, ordinances, etc., of the State of Louisiana or the City of New Orleans.

2-24 LINES AND GRADES

Paragraph 46 of Section A-1 of the General Specifications is amended to read as follows:

"The Engineer will establish permanent control points for the centerline of the construction and a control benchmark for elevations. From these established control points and the benchmark, the Contractor shall establish all locations and grade of the work and shall be solely responsible for the exact position of all parts of the work with reference to the established line and the benchmark. The Contractor shall maintain his own field engineering force, for this purpose, that of the Engineer being for checking the Contractor's locations only. The Contractor shall furnish, free of charge, all stakes, permanent bench construction, templates, instrument platforms, and other materials necessary for marking and maintaining points and lines given and shall furnish the Engineer such assistance as he may require in checking the layout of the work. The Contractor will be held responsible for the protection of all stakes and marks and if, in the opinion of the Engineer, benches or lines established by the Engineer have been destroyed or disturbed, they shall be replaced at the Contractor's expense."

2-25 SURVEY AND LAYOUT DATA

A. All field books, notes and other data developed by the Contractor in performing surveys required as part of the Work shall be available to the Engineer for examination throughout the construction period. All such data shall be submitted to the Engineer with the other documentation required for final acceptance of the work.

B. Contractor shall keep neat and legible notes of measures and calculations made by him in connection with the layout of the Work. Copies of such data shall be furnished to the Engineer or Resident Project Representative for use in checking Contractor's layout as provided under Lines and Grades. All such data considered of value to the Board will be transmitted to the Board by the Engineer with other records upon completion of the Work

2-26 MATERIALS BY CONTRACTOR AND MATERIALS BY OTHERS

The Contractor shall furnish all materials required for the various items of work except where specifically shown otherwise in the Contract Documents.

2-27 OPERATIONS AND MATERIAL STORAGE AREA

- A. Any area of the Board's property can be used by the Contractor for storage, work operations, etc., contingent upon the Engineer's approval. At the time approval is granted, the Engineer will outline the particular qualifications to be imposed in the use of that area. If materials are stored anywhere within the area without this approval, the Engineer, at his discretion, can order them moved to a more suitable location.
- B. All operations of the Contractor including storage of material on Sewerage and Water Board's premises shall be confined to areas authorized or approved by the Engineer. The Contractor shall hold and save the Sewerage and Water Board harmless from liability of any nature occasioned by his operations.
- C. Temporary buildings (storage sheds, shops, offices, etc.,) may be erected by the Contractor only with the approval of the

Engineer and shall be built at no cost to the Sewerage and Water Board. Such temporary buildings and utilities shall remain the property of the Contractor and shall be removed by him at his expense upon completion of the work.

- D. No equipment or material shall be placed where access to any station by truck will be obstructed in the event of a breakdown.
- E. No materials or equipment may be placed over underground structures whenever such storage or use may impair effectiveness or limit maintenance or impose excessive loadings.
- F. The Engineer may order moving of materials of equipment at no cost to the Board even from places where approval has been granted if it becomes necessary to the operation of the Board's facilities because of things unforeseen at the time of approval, such as breakdowns, failures, etc.
- G. Any area occupied by the Contractor shall be cleaned up in accordance with the requirements of Paragraph No. 54, in Section A-1 of the General Specifications.
- H. The Sewerage and Water Board assumes no responsibility for any loss of or damage to the Contractor's material, tools, or supplies.
- I. Trees and shrubs shall not be cut or damaged without the permission of the Engineer.

2-28 WATER AND OTHER UTILITIES

- A. It shall be the responsibility of the Contractor to make all necessary arrangements for the provision of water, electricity, drainage, sanitary sewage disposal, gas, compressed air, and any other utility service required to prosecute the work of this contract.
- B. Water used by the Contractor at the jobsite will be furnished by the Board at a cost to the Contractor. Contractor shall familiarize himself with "Sewerage and Water Board of New Orleans Hydrant Meter Installation Non-potable Standard) and Potable (Special Festival) Water Use" Policy and Procedure. These documents are available on the Sewerage and Water Board's Web site: http://www.swbno.org/custserv_information_docs.asp.
- C. Contractor shall complete a hydrant meter application for his construction project for each location, if more than one is needed. The hydrant meter(s) shall be turned over to the Sewerage and Water Board every six (6) months for recalibration by the Board's Meter Shop located at 8800 South Claiborne Ave. Each Hydrant Meter shall be returned to the Meter Shop at the end of the construction project otherwise forfeit the deposit(s).
- D. Costs of all other services shall be borne by the Contractor.
- E. Connections to fire hydrants shall only be made with meters obtained from the Sewerage and Water Board Customer Service Department, 585-2097, which shall record water usage for record purposes and which shall be returned to the Board as a condition of acceptance of the Contract. Application for the meter requires a \$1,500.00 deposit that is refundable upon return of the meter in undamaged and operable condition.
- F. If the bidder is selected as the lowest responsive and responsible bidder and is awarded this contract, then should the Contractor owe the Sewerage and Water Board of New Orleans ("Board") any funds not relating to this contract by virtue of the Contractor having been previously provided any services from the Board such as water or any other service, the parties agree to discharge by set-off the Board's debt and the Contractor's debt once the Contractor submits its Request for Payment or any similar document such as a request, invoice, etc., in connection with the Contractor's performance of work on this contract, both debts being at the time enforceable.

2-29 EMERGENCY TELEPHONE

The Contractor shall, before contract work begins, furnish to the Engineer Telephone Numbers at which company officers or responsible persons can be contacted at night, weekends and holidays in case of emergencies.

2-30 PROJECT WORK SCHEDULE

- A. Upon receipt of the "Work Order" the Contractor shall inspect work sites within 5 days. Within 14 days of receipt of work order and prior to commencement of any work on the contract, the Contractor shall be required to provide a schedule to complete work associated with the site including surface restoration. This document will be used in the preparation of progress payments to the Contractor.
- B. The form of the combined schedule, although subject to change upon order of the Engineer, shall consist of:
 - 1. Separation of the entire construction project into its stages, as well as any specific related stages such as bond, insurance, material or equipment shipment, etc., in terms of actual dollar value.
 - 2. A listing of these construction stages with the proposed starting and completion date shown for each construction stage. At the end of each monthly increment, the Contractor shall indicate by a percentage figure directly on the schedule the percent completion he expects to attain for that interval.
 - 3. Shown directly below the expected completion percentage shall be an "actual progress" percentage completion indicated at monthly intervals intended to represent the actual progress toward completion for that interval.
- C. The actual monthly progress percentage multiplied by the construction stage dollar value will result in a figure which when added to the other monthly construction stage dollar values and their respective percentage multipliers will give a total to be used for a progress payment to be made to the Contractor.
- D. Since the combined cost-progress schedule to be submitted monthly is to be used in the preparation of the progress payment, it is imperative that the Contractor exercise careful consideration in assigning the percent complete expected on his proposed graph and it is expected that the actual percent complete shall rarely exceed the proposed percent. The Contractor shall re-examine his proposed schedule monthly and alter it accordingly to insure this does not occur.
- E. Should it appear to the Board's Engineer that the cost breakdown on progress schedule is in error or proves inadequate; the Engineer will direct the Contractor to alter his form to make it comply with the requirements of the Board.
- F. Progress at each active repair site will be continuous and subject to normal work hours, work days and weather.

2-31 JOB SITE DRAWINGS AND SPECIFICATIONS

- A. A complete and current set of contract drawings and specifications, including any addenda, shall be maintained on the job site by the Contractor.
- B. One copy of all approved shop drawings, equipment or material drawings, etc. shall be maintained on the job site by the Contractor.

2-32 CONTRACTOR'S WORK

- A. The Contractor shall furnish, deliver, and unload all materials, tools, appliances and rigging necessary for the completion of this Contract as covered by these specifications.
- B. The Contractor shall furnish all labor, skilled and unskilled.

2-33 CONTRACTOR'S RESPONSIBILITY FOR WORK

B. The Contractor shall give personal attention to and supervise the work to the end so that it shall be prosecuted faithfully; and, when the Contractor is not personally present on the work, the Contractor shall be at all time represented by a competent superintendent or foreman who shall be present at the work and who shall receive and obey all instructions or orders given under this contract, and who shall have full authority to execute the same, and to supply materials, tools and labor without delay, and who shall be the legal representative of the Contractor. The Contractor shall be liable for the faithful observance of any instructions delivered to the Contractor or to the Contractor's authorized representative.

- B. Until final written acceptance of the project by the Board, the Contractor shall have the charge and care thereof and shall take every precaution against damage to any part thereof by the action of the elements or from any other cause, whether arising from the execution or non-execution of the work. The Contractor shall rebuild, repair, restore and make good all damages to any portion of the work, before final acceptance, including damage to the work due to unforeseeable causes beyond the control of and without the fault or negligence of the Contractor; acts of God, of the public enemy or of governmental authorities and shall bear the expenses thereof.
- C. In case of suspension of work from any cause, the Contractor shall be responsible for the project and shall take such precautions as necessary to prevent damage to the project, provide for normal drainage and erect any necessary temporary structures, signs or other facilities at his expense.

2-34 CONTRACTOR'S EMPLOYEES

The Contractor shall at all times enforce strict discipline and good order among his employees and shall not employ on the work any unfit person or anyone not skilled in the task assigned to him. The Engineer has the right to require the Contractor to remove any employee from the jobsite for just cause. Any contractor employee that is removed for cause shall be ineligible to return to any worksite for the duration of the contract.

2-35 OTHER CONTRACTS

The Sewerage and Water Board has, or may undertake, or award, other contracts for other, or additional work and this Contractor must fully co-operate with such other Contractors and Sewerage and Water Board employees and carefully fit his own work to such other, or additional work, as may be directed by the Engineer. This Contractor must not commit or permit any act that will interfere with the performance of work by any other Contractor or Sewerage and Water Board employees.

2-36 PARKING FACILITIES

Contractor personnel will not be permitted to park personal vehicles on S&WB property due to limited and restricted area available for this purpose. The Contractor will be allowed to bring construction equipment and construction vehicles only into the site as necessary in the execution of this contract but may be required to remove them if their presence interferes with the operation of the Board, at the discretion of the Engineer.

2-37 BOARD'S RIGHT TO OCCUPANCY

- A. The Board will have full access to and full use of all existing utilities during the entire period of construction for the conduct of its normal operations. The Contractor shall cooperate with the Engineer and the Board in all construction operations to minimize conflict, and to facilitate Board usage.
- C. The Contractor shall at all times provide proper facilities for access and inspection of the work by representatives of the Board, the Engineer, inspectors, and any such official Governmental Agencies as may be designated by the Board as having jurisdictional rights to inspect the work.

2-38 SITE SECURITY

- A. All Contract Employees who enter Sewerage and Water Board Facilities shall have current and legible picture ID Badges issued by the Contractor. No one will be allowed to enter the Facilities without displaying this badge, which shall also be worn, and visible at all times.
- B. The Contractor shall insure that the site is properly secured at the end of each workday. Fences shall be intact and the gates locked. The Contractor shall also provide and maintain all necessary flagmen, watchmen, barricades, devices as required for the protection and safety of the work and the public against personal injury and property damages. The Contractor will be responsible for any and all damages, injury or loss resulting from his failure to provide such necessary protective precautions.

2-39 INJURIES AND DAMAGES TO PERSONS AND PROPERTY

- A. The Contractor shall be held alone responsible for all injuries to persons, and for all damage to the property of the Sewerage and Water Board or others, caused by or resulting from the negligence of himself, his employees, or his agents, during the progress of, or connected with the prosecution of the work, whether within the limits of the work or elsewhere, and whether under the contract proper or as extra work.
- B. The Contractor must protect and support all water, sewer and gas pipes or other conduits and buildings, walls, fences or other properties that are liable to be damaged during the execution of his work. He shall take all reasonable and proper precautions to protect persons, animals and vehicles of the public from injury, and shall erect and maintain a fence or railing around all excavation and place a sufficient number of warning lights about the work and keep them illuminated from twilight until sunrise, and shall employ one or more watchmen, if required, as an additional security. He must, as far as practicable and consistent with good construction, permit access to private and public property and leave fire hydrants and catch basins and canals free from encumbrances. He must restore, at his own expense, all damaged property caused by any act of omission or commission on his part, or on the part of his agent, including sidewalks, curbing, sodding, pipes, conduits, sewers and other public or private property, to a condition as good as it was when he entered upon the work.
- C. In case of failure on the part of the Contractor to restore such property or make good such damage, the General Superintendent may upon forty-eight (48) hours notice proceed to repair, rebuild or otherwise restore such property as may be deemed necessary, and the cost thereof, will be deducted from any monies due, or which may become due, under this contract.
- D. The Contractor shall indemnify and save harmless the Sewerage and Water Board from all suits and actions that may be brought against it by reasons or any injury, or alleged injury, to the person or property of another, resulting from negligence or carelessness in the execution of the work, or because of failure to properly light and guard the same, or on account of any act of commission or omission on the part of the Contractor, his representative or employees.
- E. There will be no direct payment for erection and maintaining a fence or railing around excavation, placing warning lights and providing watchmen and supporting and protecting utilities as prescribed in (B) above.

2-40 NIGHT, WEEKEND OR HOLIDAY WORK

- A. Night, weekend or holiday work requiring the presence of an Engineer or inspector will be permitted only in cases of emergency, and then only to such an extent as is absolutely necessary and with the written permission of the Engineer. In the event such work becomes necessary, no extra payment will be made.
- B. No work shall be performed outside of normal working hours and workdays without the prior approval of the Engineer.

2-41 SUSPENSION OF WORK

- A. The Engineer may order the Contractor in writing to suspend, delay or interrupt all or any part of the work for such period of time as he may determine to be appropriate. The Engineer may also suspend, delay or interrupt the work wholly or in part due to the failure of the Contractor to correct conditions unsafe for the workmen or the general public; for failure to carry out provisions of the contract; for such period of time as may deem necessary due to unsuitable weather; or for any other condition or reason deemed to be in the public interest.
- B. No adjustment to the time of completion for the project will be made if the suspension, delay or interruption to the work is ordered due to the fault or negligence of the Contractor; however, if such suspension, delay or interruption if ordered for reasons other than the Contractor's negligence, the period of such suspension, to be determined by the Engineer, shall be added to the time specified for the completion of the work under this contract.
- C. If the work is suspended for any reason, all materials delivered at the work but not yet placed therein shall be neatly stored so as not to constitute an obstruction.

2-42 INSPECTION AND ACCEPTANCE

- A. All work shall be subject to inspection and test by the Board at all reasonable times and at all places prior to acceptance. Any such inspection and test is for the sole benefit of the Board and shall not relieve the Contractor of the responsibility of providing quality control measures to assure that the work strictly complies with the contract requirements. Inspection or test shall not relieve the Contractor of responsibility for damage to or loss of the material prior to acceptance.
- B. The Contractor must promptly replace rejected material or correct any workmanship found by the Board not to conform to the contract requirements. The Contractor shall promptly remove rejected material from the premises.
- C. If the Contractor does not promptly replace rejected material or correct rejected workmanship, the Board (1) may, by contract or otherwise, replace such material or correct such workmanship and charge the cost thereof to the Contractor; or, (2) may terminate the Contractor's rights to proceed in accordance with the Paragraph 27 of the Section A-1 of the General Specifications.
- D. The Contractor shall furnish promptly, without additional charge, all facilities, labor, and material reasonably needed for performing such safe and convenient inspection and test as may be required by the Engineer. All inspection and tests by the Board shall be performed in such manner as to not unnecessarily delay the work. Special, full size, and performance tests, shall be performed as described in this contract. The Board reserves the right to charge to the Contractor any additional cost of inspection or test when material or workmanship is not ready at the time specified by the Contractor for inspection or test or when re-inspection or retest is necessitated by prior rejection.
- E. Should it be considered necessary or advisable by the Board at any time before acceptance of the entire work to make an examination of work already completed, by removing or tearing out same, the Contractor shall, on request, promptly furnish all necessary facilities, labor and material. If such work is found to be defective or nonconforming in any material respect, due to the fault of the Contractor or his subcontractors, he shall defray all the expenses of such examination and of satisfactory reconstruction.
- If, however, such work is found to meet the requirements of the contract, an equitable adjustment shall be made in the contract price to compensate the Contractor for the additional services involved in such examination and reconstruction and if completion of the work has been delayed thereby, he shall, in addition, be granted a suitable extension of time.
- F. Unless otherwise provided in this contract, acceptance by the Board shall be made as promptly as practicable after completion and inspection of all work required by this contract. Acceptance shall be final, and conclusive except as regards latent defects, fraud, or such gross mistakes as may amount to fraud or as regards to the Board's rights under any warranty or guarantee.

2-43 PROJECT CLOSE-OUT

Satisfactory project close-out is a condition of final acceptance of the Work and will be performed after the following is completed.

- A. Contractor shall deliver to the Engineer all construction records, certifications, and other documents in accordance with these Contract Documents.
 - All damaged or deteriorated surfaces shall be touched up or repaired to the satisfaction of the Engineer. All incomplete or defective work shall be remedied as required by the provisions stated herein for Inspection and Acceptance.
 - Contractor shall remove from the site all of his temporary structures, trailers, tools equipment, supplies, and unused or waste materials. Roads, fences, and other facilities damaged or deteriorated because of Contractor's operations shall be repaired to the satisfaction of the Engineer. All ground surfaces affected by Contractor's operations shall be restored by grading, raking, smoothing, and other necessary operations. The site shall be thoroughly cleaned, and all rubbish, trash and debris removed.

Board issued hydrant meters shall be returned to the Sewerage and Water Board Meter Shop, 8800 South Claiborne
Avenue, for final reading after completion of the Contract. Return of the meter is a condition of acceptance of the
contract.

B.After all work is complete, any necessary changes in the Contract amount will be determined by the Engineer and the necessary adjustment, if any, will be incorporated into a final Change Order.

C.Upon satisfactory completion of closeout activities and delivery of Record Drawings to the Engineer, Contractor shall submit applications for Final Payment as provided in the General Specifications.

2-44 AS-BUILT DRAWINGS

- A. The Contractor shall furnish one (1) neat and legibly marked blue line set of contract drawings to depict actual "as-built" conditions.
- B. The "as-built" drawings shall show all construction, elevation, equipment, mechanical and electrical systems and connections as installed or built.
- C. The work under this contract will not be considered "complete" until "as-built" drawings, prepared to the satisfaction of the Engineer, are received.
- D. There will be no direct payment for furnishing the "as-built" drawings specified above.
- E. As-Built Drawings will not be required unless manholes have been added or the location of the main and service connections have been modified.

2-45 SAFETY

- A. The Contractor shall take proper precautions to safeguard his work force and the Board's facility during his work. Only Engineer approved methods of construction shall be used.
- B. The completed installation and operations during installation shall comply with the Occupational Safety and Health Act (OSHA) and all changes in effect at the time proposals are submitted. Particular attention shall be directed to safety regulations for excavations and confined space entry.
- C. At all times during the course of this contract, the contractor will be in compliance with all federal, state, and local health and safety requirements, will allow inspection of the worksite by the Sewerage and Water Board's Safety Unit, and will provide copies of his written safety program and written safety procedures to the Board's Safety unit within one calendar week if required by the Board's Safety Unit. A senior employee of the contractor and/or any subcontractor will review the Sewerage and Water Board Safety Orientation Notice (Notice), and will explain the information in this Notice to every employee who will enter Board facilities or jobsites. This notice is included in Appendix B as an attachment to the specifications for this contract.

2-46 INSURANCE CERTIFICATE

- A. The Contractor shall submit the required insurance certificates no later than 10 days after Notification of Award of the contract.
- B. INSURANCE REQUIREMENTS (AMENDED): refer to Section A-1 Paragraph (16)

2-47 WORKERS' COMPENSATION AND UNEMPLOYMENT COVERAGE

A. WORKERS' COMPENSATION:

The Contractor expressly agrees and acknowledges that it is an "independent contractor" as defined in LSA-R.S.23:1021(6). That its employees shall not be considered employees of the Board for workers' compensation coverage, and that the Board shall not be liable to the contractor or its employees for any workers' compensation benefits

or coverage.

B. EXCLUSION OF UNEMPLOYMENT COMPENSATION COVERAGE:

Contractor herein expressly agrees and acknowledges that it is an "independent Contractor" as defined in LSA-R.S.23:1472(E), that neither the contractor nor any one employed by the Contractor shall be considered an employee of the Board for the purpose of employment compensation coverage.

2-48 S&WB RIGHT TO AUDIT PROVISION

The Board shall have the right to audit by its personnel or its authorized representative, at all reasonable times, any and all records pertaining to the administration of this contract by the contractor, including its records of any subcontractor (s) employed on the contract. Such records shall be made and kept by the contractor in accordance with generally accepted accounting principles and practices. Records shall include, but are not limited to, accounting records, daily reports, correspondence and subcontract files (hard copies as well as computer readable data, if it can be made available). Records subject to audit shall also include, but not be limited to, those records necessary to evaluate and verify direct and indirect costs (including overhead allocations) as they may apply to cost and/or change order requests associated with this contract. The Board also reserves the right to interview employees, make photocopies, and inspect any and all records at a reasonable time for a minimum of three (3) years after completion of the project or formal acceptance by the Board of the contract. Contractors shall be required to retain such files of the project as described herein for a minimum of three (3) years after completion of the project or formal acceptance of the contract by the Board.

2-49 EQUAL EMPLOYMENT OPPORTUNITY

A. In all hiring, employment, or other activity made possible or resulting from this agreement, there shall not be any discrimination against any employee, or applicant for employment because of age, race, color, religion, handicaps, sex, or national origins, and where applicable, affirmative action will be taken to ensure that employees are treated during employment without regard to their age, race, color religion, handicaps, sex and national origin. This requirement shall apply to, but not be limited to, the following:

Employment, upgrading, demotion or transfer, recruitment and advertising, layoff or terminations, rates of pay or other forms of compensation, and selection for training, including internship and apprenticeship.

B. All solicitations or advertisements for employees shall state that all qualified applicants will receive consideration for employment without regard to age, race, color, religion, handicaps, sex or national origin.

2-50 LABOR STANDARDS

- A. The minimum wages to be paid laborers and mechanics shall be the prevailing wages for corresponding classes of laborers and mechanics employed on projects of a character similar to the contract work; said prevailing wages to be determined by the Secretary of the U.S. Department of Labor. (See Appendix C)
- B. The successful bidder is to make available to the Board, complete records in connection with payment of employees during the term of the job in order to permit the Internal Audit Division to check as to adherence to the wage scale presently in effect in accordance with U.S. Government standards.

2-51 DRUG FREE WORKPLACE POLICY

- A. It is the policy of the Sewerage and Water Board that all workplaces and facilities be kept drug and alcohol free at all times.
- B. In order to ensure compliance with this policy, the Board has approved and implemented the "Drug Free Workplace Policy" which is attached hereto in Appendix B and which shall be implemented and rigidly enforced on this contract.

2-52 BI-WEEKLY JOB SITE MEETINGS

A. Once every two (2) weeks, or as determined necessary by the Engineer, on a date and location mutually agreed upon by the Contractor and the Engineer, a meeting shall be held for review of the Project, including, but not limited to, the

construction and inspection schedule, progress of the construction, traffic control, submittals and any other issues that may arise. The meeting may be used to review the Contractor's monthly application for payment. The Contractor shall preside over all these meetings and shall arrange for subcontractors and material suppliers to be present as needed to discuss their specific work.

B. The Engineer will keep and distribute minutes of each meeting to all attending parties.

2-53 ENVIRONMENTAL REQUIREMENTS - MEETING CONSENT DECREE CONDITIONS

- A. The parties agree that the work and duties required to be performed in accord with the Contract Documents shall meet and comply with all environmental requirements to include the laws and regulations of the United States and the State of Louisiana, and shall satisfy and be in accord with the provisions of the Consent Decree with attachments entered into by and between the BOARD and CITY with the EPA and the UNITED STATES in the matter entitled "UNITED STATES OF AMERICA V. SEWERAGE AND WATER BOARD OF NEW ORLEANS, ET AL," No. 93-3212, United States District Court, Eastern District of Louisiana and all modifications thereof, which provisions the CONTRACTOR must acquaint itself and become familiar with prior to bidding on said Contract.
- B. The above mentioned Consent Decree is available on the Sewerage and Water Board web site, http://www.swbno.org/docs_consentdecree.asp
- C. CONTRACTOR specifically acknowledges the Board has made said Decree with attachments available for review and CONTRACTOR has read said decree with attachments or the pertinent parts thereof and is familiar with the terms and conditions thereof, and will pay any fines or penalties that will be assessed against the BOARD or CITY (or reimburse them therefore) which are imposed by the terms of said decree with attachments resulting from the actions of CONTRACTOR in performance of or its failure to perform its duties under this Contract.

2-54 REPORT, CONTAINMENT/BY-PASS AND CLEAN-UP

A. The Contractor shall develop a plan to report, contain/by-pass and clean up all sewage spills or unanticipated hazards that would adversely affect the health of the community.

B. REPORT

A report shall be given immediately to the S&WB Emergency Desk (942-2920). The information communicated in the report must include location, nature of problem, name of project, name of company performing work, name of the individual making the call, time of incident and other pertinent data as necessary. It should be communicated as a Priority I incident.

C. CONTAINMENT/BY-PASS

The Board's first priority in operating its sewer system is to protect the public health of the citizens and the environment in the most cost-effective manner possible.

The plan must consider all available options for immediately eliminating the discharge or diverting to a containment area, as well as options for containing the contents of, for example, a damaged main which will be evacuated during repair work. It is impossible to anticipate all the specific conditions and factors that may be relevant for any particular incident. Each incident will be unique.

To this end the Contractor will by-pass, direct and temporarily store sewage as the situation dictates to avoid contamination of soil, street, etc. that would place the citizens in contact with waste products. If these sewer wastes reach a canal it will be the Contractor's first effort to remove the contamination. Drainage pumping from the contaminated canal will be stopped.

In those circumstances when sewage cannot be removed from the canal system because of location or weather, where

possible the procedures will be dilute and flush the canals.

Considerations

The following are some of the more significant considerations; which will impact the ultimate approach to mitigation activities.

Can any or all of the discharge be returned to the sewerage system immediately? If so, how much, where and by what means?
What is the anticipated duration of the repair activity Can normal sewage flow be rerouted? If so how much?
How many and which pump stations will be affected by isolation of the force main?
Do any of the stations have the capability to bypass flow to the gravity system?
How long can the normal sewage flow in the affected gravity sections be interrupted before property damage or upstream overflows occur?
Is there the capability to create in-system containment by artificial draw down of the associated gravity system(s) and if so, how much?
Is there the capability to create a containment area utilizing a drainage canal or catch basin, how would the flow be reintroduced into the sewerage system and could an effective clean-up of the containment area be accomplished? (One or more containment areas could be considered not only at the repair site but at an affected pump station or other location).
Is there a capability to haul sewage (vac tanker, vac truck etc.) from either the repair site or anticipated up-stream overflow location?
Is a rainfall event anticipated during the repair or clean-up activities?

Because of the varying conditions, locations and circumstances which have an impact on the planning process, the development of specific procedures is not practical. It is far more important for a response action plan such as included herein, to provide for the availability of the resources including senior management expertise, such that a response can be initiated in an expedient and thoughtful manner. As evidenced in other sections of this document, the Board has a policy of requiring Division and Department managers to be available on call 24 hours per day and to personally respond to all emergencies including Sanitary Sewer Overflows.

The ability to call on the experience of these managers as a matter of policy ensures all possible avenues of mitigation are considered and all required resources are dedicated to this response effort.

D. CLEAN-UP/DISINFECTION

For public areas that have come in contact with overflowed sewage, the Contractor will take reasonable action to implement disinfection procedures. Generally, these procedures will involve an application of an oxidizing agent such as a dilute chlorine solution on constructed surfaces (streets, driveways, walls, etc.) and a lime application on organic surfaces (lawns, soil areas, etc.). The level and extent of disinfection will be determined in the field. It is not the intent of this disinfection procedure to infer that total pathogen destruction has been achieved, nor that any other level of disinfection has been achieved.

SECTION 3

WATER MAINS - MATERIALS, INSTALLATION AND PAYMENT

3-01 GENERAL

- A. The existing utilities shown are approximate. The Contractor shall verify the location of all utilities in the field and shall protect them from damage.
- B. The Contractor shall furnish all labor, supervision, materials and equipment required for the replacement of existing water mains with new water mains, including house connections, valves, manholes, hydrants, tie-ins, and making necessary offsets, as required.
- C. All workmanship and materials shall conform to section F of the General Specifications of the S&WB, S&WB Standard Drawings and Dwg. No. 7260-W, except as noted herein.
- D. The Contractor shall notify the Chief of Engineering of the Sewerage and Water Board in writing a minimum of three working days and not more than ten working days in advance of starting the job.
- E. Water and sewer services that are damaged by the Contractor shall be repaired by the S&WB at the Contractor's expense. The Contractor will be furnished a list of the locations of water and sewer house connections. This listing is from S&WB records and the listed locations could vary from the actual locations. It is the Contractor's responsibility to field verify the location of these services and to protect them from damage. Furnishing this information should not be construed as a waiver of the Contractor's liability, but rather an attempt on the part of the Board to minimize the Contractor's hazards.
- F. Contract 2143 shall not require the Contractor to hold a Class IV (four) Operator Certification for Water and Wastewater.

3-02 WATER MAINS

3-02.01 MATERIAL

The Contractor shall furnish all materials required for the various items of work, except for the water meters and where specifically shown otherwise in the Contract Documents. All materials shall be installed in accordance with the manufacturer's recommendation.

For underground water service line valves and fittings, all materials shall comply with the requirements of the Safe Drinking Water Act and other federal, state and local requirements. Materials shall conform with AWWA C800-05 or latest revision.

Materials shall conform with Sewerage and Water Board General Specifications, Section "C" - Materials and Sewerage and Water Board Drawing Nos. 7134 and 7332-W. **House connections** shall be fabricated from high density, ultra high molecular weight polyethylene PE3406 or PE3408 tubing material conforming with the latest issue of ASTM D-2737 and D-1248 for Type III or IV Grade P-34 Class C. Three quarter inch (0.75") polyethylene pipe shall be installed for a five eighth inch (5/8") meter installation and one inch (1") polyethylene pipe shall be installed for a one inch (1") meter installation unless otherwise noted (See Sewerage and Water Board Standard Drawing No. 7332-W).

Water main of a diameter sixteen inches (16") and smaller shall be Class 150 Polyvinyl chloride (PVC) pipe manufactured in accordance with AWWA C-900 (Latest Edition) and shall be U.L. listed. All fittings and water main pipe larger than sixteen inches (16") in diameter shall be of ductile iron conforming with AWWA C110. All ductile iron fittings and pipe shall be installed with polyethylene encasement installed in accordance with AWWA C105.

Gate valves sized 4" to 10" shall meet all requirements of AWWA C-500 or latest revision. Gate valves shall be of double rotating disc, ductile iron body, parallel seat design. Independent wedging action shall be designed to spread the two discs against the seat in the valve body. Seat in the valve body shall be field replaceable without removing the valve from the pipeline. Discs are to be free to revolve 360 degrees for even distribution of wear on disc face and mating seat rings. Gate valves to be available with flanged or mechanical joint ends for connection to piping specified.

All gate valves shall conform to:

- American-Darling Company Drawing No. 93-16039 (Sewerage and Water Board Drawing No. 7091-F-2)
- Mueller Company Drawing No. 6143 (Sewerage and Water Board Drawing No. 6737-F 2)
- U.S. Pipe & Foundry Drawing No. 860036 (Sewerage and Water Board Drawing No. 6908-F-2 for 2" to 8" valves only)
- M&H Drawing No. 9274 (Sewerage and Water Board Drawing No. 6357-F-2)

Hydrants shall conform with Sewerage and Water Board General Specifications, Section "C" – Materials and SWB Drawing No. 6179-F-2. Acceptable hydrants are:

- R.D. Wood (Matthews Modernized M-62 Drawing No. F-24-73257 and SWB Drawing No. 6372-F-2)
- American-Darling Co.'s B-62-B Drawing No. 94-1410-6 (SWB Drawing No. 6868-F-2, Rev. 6/77)
- U.S. Pipe & Foundry Drawing No. 960021 (SWB Drawing No. 6802-F-2)

All new hydrants must be so similar to those now existing in the system that parts shall be interchangeable. Hydrants shall be of nominal five inch (5") size, have base elbows for six inch (6") hydrant leads and have one steamer nozzle and two hose nozzles of size, shape and threads as shown on SWB Drawing No. 6179-F-2.

All pipe joints shall be restrained unless otherwise directed by the Engineer

PVC joints at the fittings and straight pipe shall be restrained by use of Mega Lug or approved equal. Restraint devices for PVC pipe shall have a working pressure rating equal to the full rated pressure of the PVC pipe on which they are installed, with a minimum 2:1 safety factor. Restrainers shall meet or exceed the requirements of Uni-B-13-92, "Recommended Performance Specifications for Joint Restraint Devices for use with Polyvinyl Chloride (PVC) pipe.

Joint restraint devices for use with ductile iron pipe shall be series 1100 or series 1100 HD as manufactured by EBAA Iron Sales, Inc. or approved equal.

Joint restraint devices shall have a minimum rated working pressure of 250 psi with a 2:1 safety factor. Joint restraint devices shall be installed in polyethylene encasement as specified for ductile iron pipe and fittings.

Tapping of PVC water main shall be made with service saddles suitable to use with PVC pipe, i.e., Power seal No. 3407 (all bronze) or approved equal. Corporation stops shall be Mueller N-15000 or Ford F-1000.

3-02.02 INSTALLATION

Repair of water mains, service connections, fire hydrants and valves shall be in accordance with Sewerage and Water Board General Specifications, Section "F"- Construction of Water Mains, Sewerage and Water Board Standard Drawing No. 6179-F-2 and with the manufacturer's recommendations.

For **water mains**, the deflection of pipe shall not exceed the manufacturer's recommendation and shall be made with the use of fittings.

All **gate valves** must turn clockwise to open.

Hydrant leads shall be Class 150 (AWWA C-900), solid wall PVC pipe; have a lugged tee with stainless steel tie-rods, nuts and washers in addition to wood blocking. Hydrants shall be located six feet (6'-0") off the property line of corner lot and within five feet (5'0") of the lot center of sites with the square, or where directed by Engineer.

The installation of 5/8" and 1" **meter box** shall be understood to include Meter Box Barrel, Meter Box Locking Top Lid, Meter Box Base, Meter Box Stop Cock, and Meter Box Expansion Hand-wheel.

The installation of ¾" and 1" **inlet and outlet** shall be understood to include procurement and installation of: Brass Adaptor Bend, C & I Brass Corporation Cock, C & I Brass Service Coupling, and Plastic Tubing

The installation of 1.5" to 2" inlet and outlet shall be understood to include procurement and installation of: Brass Adaptor Bend, L & I Brass Corporation Cock, C & I Brass Service Coupling, I & I Brass Stop Cock, Brass Union, Brass Nipple, Plastic Tubing.

No **direct tapping** of PVC pipe will be permitted for making house connections. The Contractor shall use only shell type (hole) cutters that will retain the coupon or chips and are designed to accommodate wall equal to pressure class 200. **Service saddle** shall be installed on an angle as shown on Sewerage and Water Board Drawing No. 7134.

The Contractor shall be responsible for the cleanliness of the trench at all times, from commencement of the work until completion of the work and final acceptance by the Sewerage and Water Board. During construction, the Contractor shall keep the trench free from dirt, trench water, debris, rodents, etc. At the end of each days work, or stoppage of work, the Contractor must provide an approved temporary water tight wing nut test plug (Model A0902 Climax or equal) at each open end.

When work is resumed, the trench must be free of water and debris before the plug is removed.

All pipe or tubing shall be laid so as to have a minimum permanent **depth of cover of three foot six inches (3'6")**. In all cases, the grade thus established shall provide a depth of protective backfill from the ground surface as well as between any other utility in close proximity.

In areas where the curb or sidewalk grade is changed, the meter boxes shall also be adjusted. Bricks, slates or similar material shall be used under the bottom of the meter box. There shall be no separation between the barrel and lower meter pan.

The base of the meter pit shall be relatively smooth and free from roots, rocks, etc. to the Engineers satisfaction. After sheeting, bracing and/or foundation lumber are placed (if required by Engineer), a six-inch (6") layer of compacted sand shall be placed on trench bottom for full trench width. Compaction shall be accomplished as described below. The meter bottom shall then be installed on the smooth, compacted sand and additional sand placed and consolidated around the manhole or meter box. Meters greater than 1" will require a manhole, those greater than 2" will require a vault.

Contractor shall apply a one-half (1/2") inch thick layer of cement mortar composed of one (1) part of Portland Cement and two (2) parts of sand, or approved equal, to the surface of walls (inside and outside) of water meter and sewer manholes or water meter vaults.

The Contractor shall be responsible for the cleanliness of the pipe at all times, from commencement of the job until completion of the work and final acceptance by the Sewerage and Water Board. During construction, the Contractor shall keep the pipe free from dirt, trench water, debris, rodents, etc. At the end of each days work, or stoppage of work, the Contractor

must provide an approved temporary water tight wing nut test plug (Model A0902 Climax or equal) at each open end. When work is resumed, the trench must be free of water and debris before the plug is removed.

The meter pit shall be backfilled with material compacted to a minimum of 98% relative compaction. Relative compaction is defined as:

<u>Dry density of compacted soil x 100</u> "Maximum" dry density of soil

Maximum dry density of soil shall be determined by the standard Proctor test, ASTM D698.

Moisture content of compacted soils shall be no more than two percent (2%) above or below optimum moisture content. Backfill material, placement, and compaction shall be select material in 6" lifts compacted via high frequency explosion or combustion tampers. Select material shall be defined as material completely free of all trash, rubbish, roots, rocks over 2" in diameter, or other perishable or objectionable matter.

There will be no additional pay in the event that hand digging is required, even if the entire repair must be done by hand. Furthermore, any and all cost of bypass pumping, both set up and operational maintenance, including any necessary ramps over the bypass piping and traffic control, shall be included in the price bid.

The Contractor will be expected to perform tie-ins to the existing system without removing additional customers from service wherever possible. Towards that end, the Engineer will expect services to be hot tapped, except under unusual circumstances. In the event that installation of a tee is authorized in lieu of hot tapping the main, the price for the installation of the tees shall be understood to include all materials required to complete the tap including, but not limited to, procurement and installation of tapping sleeves.

After tie-in is complete, the system will be refilled under normal water main pressure (approximately 50 p.s.i.). The water point repair will then be visually inspected for leaks and any leaks disclosed will be repaired by the Contractor, at their expense.

3-03 LUBRICANT FOR GASKETED PIPE AND FITTINGS

3-03.01 STANDARDS

Lubricant shall be suitable for potable water systems and shall conform to and be certified by both of the following standards:

ANSI/NSF 14: Plastic Piping System Components and Related Materials ANSI/NSF 61: Drinking Water System Components – Health Effects

3-03.02 REQUIREMENTS

Lubricant shall be nontoxic and suitable for potable water systems, non-corrosive and be non-flammable. Lubricant shall be an emulsified polymer based product, specifically formulated to be water-soluble *without* causing turbidity. Lubricant shall not transfer taste and/or odor to the new water main installations. Lubricant shall not promote bacterial growth and be safe for use on all metal and plastic pipes. Lubricant shall be easily flushed from the line and be non-reactive to chlorinated water. Lubricant should work easily on both wet and dry surfaces.

The use of oleate-based lubricants is not permitted for new water main installations due to odor and taste transfer problems.

3-04 VALVES

- A. Valves shall be procured by the Contractor. Valves 4 in. to 12 in. shall be S&WB R.D. Wood Gate valves as shown in S&WB Dwg. 11897-W-62 or American RD Rotating Gate Disc Valve C-500 with adjustable packing. Valves 16 in. and larger shall be American RD gate valves. Valves shall have raised pattern letters "SEWERAGE AND WATER BOARD" on the body of the valve. Valves must turn clockwise to open.
- B. Valves 4" to 12" shall be installed as shown on S&WB Drawing 6179-F-2.
- C. Existing valves that are replaced or no longer needed shall be removed and delivered to S&WB Central Yard, 2900 Peoples Avenue, at no direct pay

3-05 VALVE MANHOLES

- A. Valve Manholes shall be brick and installed as shown on S&WB Drawing No. 6179-F-2. Water manhole casting and covers shall conform to S&WB Drawing No. 3143-E-1.
- B. Existing manholes that are replaced or no longer needed shall be abandon in accordance with S&WB Drawing No. 8180-SD, at no direct pay.
- C. Existing manhole castings and covers that are replaced or no longer needed shall be removed and delivered to S&WB Central Yard, 2900 Peoples Avenue, at no direct pay.

3-06 FIRE HYDRANTS

- A. Fire Hydrants may or not be replaced under this contract. At the direction of the Engineer, the new hydrant may or not be tied into the existing fire hydrant lead. The size of the existing fire hydrant lead is 4" or 6". There is no direct pay for tie-ins to existing leads.
- B. Fire Hydrants that are noted to be replaced under this contract shall be supplied by the Contractor. For details of setting hydrants, see S&WB Dwg. No. 6179-F-2.
- C. New fire hydrant leads shall be 6" solid wall DR 18 PVC pipe manufactured in accordance

- with AWWA C900 and shall be included in the water main unit price per linear foot. All hydrant lead joints shall be restrained.
- D. Existing hydrants that are removed shall be delivered to the S&WB Central Yard, 2900 Peoples Avenue, at no direct pay.

3-07 SERVICE CONNECTIONS

- A. No direct tapping of the new water main will be permitted for making house service connections. Service saddles suitable to use with PVC pipe shall be used; i.e., Clow No. 3407 (all bronze) or JCM 407 Series with 2 bolts, or J. Jones J-966 (all bronze). The Contractor shall use only shell type hole cutter that will retain the coupon or chips and is designed to accommodate walls equal to pressure class 200.
- B. The Contractor shall replace all existing house water connections from the new main to the meter. There shall be no splicing allowed of new or existing water service connections. Existing services shall be tied into new mains using a service saddle and corporation cock.
- C. Existing 5/8", 3/4" and 1" water house connections to be replaced shall be replaced with 1" Polyethylene (PE) tubing from the main to the meter (see S&WB Dwg. Nos. 7134-W and 7134A-W). All other existing water house connections shall be replaced with the same size as the existing connection, unless otherwise noted.
- D. All Polyethylene (PE) tubing ¾" through 2" shall be PE 3406, DR9, conforming to ASTM D2737.
- E. All Bronze/Brass fittings, connectors, corporation stops and appurtenances shall be of domestic manufacture, SHALL BE MADE OF LEAD FREE BRONZ/BRASS, and meet all requirements of AWWA, ASTM, and ANSI for use in the potable water distribution systems.

3-08 INSPECTION

All inspection of the water main and related appurtenances will be performed under the inspection of, and to the satisfaction of the S&WB. Final acceptance of the water system is subject to a one-year maintenance period following the substantial completion date of the contract accepted by the S&WB.

3-09 HYDROSTATIC TESTING

A. The Contractor shall provide and install all materials in accordance with S&WB Dwg. Nos. 7004-W and 7005-W, latest revision. The test plugs are to be caps or plugs as required and shall be secured to the pipe ends. The test plugs become the Contractor's property after their use. Prior to commencement of the hydrostatic testing, all pipes to be tested should be filled with water a minimum of twenty-four hours prior to testing in order to minimize absorption of water by the inner surface.

- B. The Contractor shall make a hydrostatic test of the main when the entire main has been laid, and all apparent defects in the main, coating, joints, etc., have been repaired as described in Paragraph F-15 of the General Specifications. Testing of only a portion of the main will be done only with the approval of the S&WB. The Contractor shall provide all the equipment and all the labor required for filling and emptying the main and measuring the pressure and leakage. The Contractor's test setup shall include provisions for the Sewerage and Water Board to install their own pressure gage so that the Contractor's pressure readings can be verified.
- C. All valves in the system shall be wide open so that pressure will come on the flanges and the test plugs which close the ends of the main and its branches, and not on the valve discs.
- D. The main shall be filled from the nearest hydrant or from other sources of supply where hydrants are not available to the flange outlet in the test plug. When the main is completely filled with water to the satisfaction of the Engineer, the Contractor shall close the air cocks. He shall apply a hydrostatic pressure of 100 psi on the water main system and shall maintain this pressure for a minimum period of (2) two hours with no pressure loss.
- E. If leakage develops, the Contractor shall locate the leaks and repair them, working only from outside the main and using only such methods as approved in advance by the Board's Engineer.
- F. It is the intent of these specifications and of the contract based thereon, that all pipe joints be watertight under all service conditions. Any and all leaks from improperly laid or defective joints which are discovered during the leakage test or tests, or at any time prior to the elapse of one year following the final acceptance by the S&WB of the entire work, will be repaired by and at the expense of the Contractor.
- G. Hydrostatic testing shall be performed by the Contractor under the direct supervision of and to the satisfaction of the S&WB Engineer, at no direct pay.

3-10 CHLORINATION

- A. The Contractor shall not proceed with the chlorination process until successfully passing the hydrostatic pressure test and given authorization to proceed by the S&WB Engineer.
- B. The contractor shall use the continuous feed method of chlorination as described in AWWA Standard C651. The tablet method and the slug method are not acceptable.
- C. The contractor shall use either sodium hypochlorite or calcium hypochlorite to provide the disinfectant for the chlorination process. If calcium hypochlorite is used, the contractor shall pre-mix the calcium hypochlorite into solution-before application. All hypochlorite raw materials must be certified as suitable for the treatment of drinking water by an accredited certification organization in accordance with ANSI/NSF Standard 60, Drinking

Water Treatment Chemicals – Health Effects.

- D. The Contractor shall flush the mains prior to the chlorination. Flushing shall be done at flow rates sufficient to provide a velocity in the water main of at least 2.5 feet per second to remove particulate debris prior to disinfection. During this flushing process, the contractor shall make sure there are no air pockets present within the system.
- E. The Contractor shall follow AWWA Standard C651, latest revision, these special specifications and shall meet the requirements of the Louisiana Department of Health and Hospitals (LA-DHH) for installation and disinfection of potable water mains. Transporting, storage, and handling of all disinfection products, utilized for chlorination, shall be performed in accordance with all applicable Federal, State, Local Laws and Regulations.
- F. The Contractor shall chlorinate the new main, under the direct supervision of the S&WB, such that the minimum chlorine concentration throughout the system is 50 mg/l. The chlorinated water shall be retained in the pipe for 24 hours for water mains less than 30 inches in diameter, and for 48 hours for water mains greater than or equal to 30 inches in diameter. After the required retention time, the chlorinated residual shall be at least 5 mg/l free chlorine, as measured by the S&WB. If the residual is less than 5 mg/l at any point in the system, the initial flushing and disinfection procedure shall be repeated by the Contractor until a 5 mg/l free chlorine residual is obtained.
- G. The maximum length of water piping that can be chlorinated at one time is 2,000 (two thousand) linear feet.
- H. The Contractor shall flush the chlorinated water from the new main using potable water. Disposal of chlorinated water shall be in accordance with AWWA C-651 and all federal, state, and local requirements. The Contractor's chlorination and flushing setup shall include provisions for the Sewerage and Water Board to collect a sample, via a ¾" faucet without hose bib threads, on the inlet and each discharge stand pipe.
- The S&WB shall collect and analyze samples for coliform bacteria, chlorine residual, and turbidity from all pipe extremities and from representative points. All samples must be free from contamination by coliform bacteria and have acceptable turbidity levels as determined by the S&WB. The Contractor shall be responsible for final flushing and coordinating sample collection by the S&WB.
- J. Chlorination and flushing of water mains shall be performed by the Contractor, at no direct pay. Also, no additional payment will be allowed for providing taps for chlorine injection and/or flushing if necessary.
- K. In the event that a new water main tests positive for coliform bacteria following chlorination, the contractor will be responsible for reflushing the main and coordinating resampling for coliform analysis. If the second set of coliform samples test positive, the contractor shall be required to repeat the chlorination procedure. A fee may be imposed on the contractor for the additional supervision, sampling, and analysis required of S&WB employees as the result of the necessity of resampling and/or rechlorination.

3-11 TIE-INS

- A. The Contractor shall tie-in the new water main within 72 hours of receiving notification of acceptable laboratory test results from the S&WB. If the Contractor fails to complete the tie-in within 72 hours, additional flushing and re-testing for coliform bacteria by S&WB shall be required. Under no circumstances will the Contractor be allowed to make a tie-in to the existing water distribution system until acceptable laboratory test results have been obtained by the S&WB. All tie-ins shall be performed under the direct supervision, and to the satisfaction, of the S&WB. A fee may be imposed on the contractor for the additional supervision, sampling, and analysis required of S&WB employees as a result of the necessity of resampling and/or rechlorination
- B. The tie-in shall be configured in such a manner to require 18 linear feet of pipe or less. The Sewerage and Water Board does not allow installation of pipe runs greater than 18 linear feet without hydrostatic pressure testing and chlorination. All pipe used in the tie-in shall be thoroughly cleaned and swabbed with a 1-5 percent hypochlorite disinfecting solution just prior to being installed, as recommended by AWWA C651.
- C. The S&WB forces shall be responsible for the closure of all water valves. Contractors shall <u>not</u> operate S&WB valves. The Sewerage and Water Board cannot guarantee a water-tight closure. The Contractor must work continuously and without interruption until the new piping is tied into the existing system and services are restored.
- D. Before the water service is interrupted, the Contractor shall:
 - 1. Expose the existing water main at the tie-in location and verify the type, size, location, and elevation of the existing facilities.
 - 2. Have sufficient materials, equipment and manpower available at the job site.
 - 3. Verify materials on hand will meet the job needs after uncovering the existing mains.
 - 4 Request a water test closure through the S&WB Networks Department (942-3891) a minimum of seven (7) working days in advance of the scheduled tie-ins.
 - 5. Have notified all residents and the New Orleans Fire Department a minimum of twenty-four (24) hours in advance of interruption of service.
- E. After the tie-in is completed; the new line will be refilled under normal Board water main pressure (approximately 60 p.s.i.). Tie-in piping will then be visually inspected for leaks and if any leaks are discovered shall be repaired by the Contractor using only such methods as approved by the S&WB, at the Contractors expense.
- F. The contractor shall perform a final flush on the newly installed water main under the supervision of the S&WB Engineer to flush out the remaining free chlorine residual and fill the line with water representative of the quality in the distribution system prior to

hydraulically connecting the new main to the distribution system

G. All tie-ins shall be made by the contractor, at no direct pay.

3-12 AS-BUILT DRAWINGS

Prior to final inspection and testing of the system, the Contractor shall submit to the Board "as-built" drawings, at no direct pay, showing any change in line or grade from the original drawings, location of house service connections, and the limits of pavement.

3-13 CLEAN UP AND RESTORATION OF WORK AREAS

Upon completion of work and before acceptance and final payment, Contractor shall clean up work areas and adjacent property, and remove all surplus and discarded materials, rubbish and temporary structures. He shall leave the lawn areas, adjacent properties, streets and medians in clean condition throughout the entire length of job. Grass areas must be restored to their original condition and topped with not less than two inches of river sand. Shrubbery, grass, signs, etc. that was temporarily removed during construction shall be replaced in their original condition. Drains and catch basins along the route that are clogged with mud as a result of this work must be cleaned to the satisfaction of the Engineer. No extra payment will be made for this site restoration.

3-14 PAYMENT

Payment for furnishing and installing Water Mains shall be made at the contract unit price per linear foot, including main line fittings (bends, tees, etc.), fire hydrant leads, tie-ins, removal of existing pavement, excavation, removal of existing pipe (if any), pumping as necessary to prevent contaminating the existing system, bedding, complete shoring, backfilling material, approved traffic control and devices, hauling and disposal of excavation material, and any other related or incidental items required to complete this item of work for which separate payment is not provided for under other items in the Proposal Form. There shall be no direct payment for plugging and abandoning existing mains, or for abandoning existing manholes and filling with sand.

Payment for furnishing and installing Polyethylene Pipe for water house connections by open cut or jacking method shall be made at the contract unit price per linear foot, including removal of existing pavement, excavation, backfilling, service saddles, corporation cock and removal of existing pipe (if any) and any other related or incidental items required to complete this item of work for which separate payment is not provided for under other items in the Proposal Form. There shall be no direct payment for tie-ins to existing mains or meters. Existing 5/8", 3/4", and 1" water house connections to be replaced shall be replaced from the new main to the existing meter with 1" PE tubing.

Payment for Install Board Supplied 5-inch Fire Hydrant and Tie-In shall be made at the contract unit price per each, shall include transporting the fire hydrant from 2900 Peoples Ave and delivery to the job site, and complete installation to the new 6-inch lead with all joints restrained as shown on S&WB Drawing No. 6179-F-2, and any other related or incidental items required to complete this item of work for which separate payment is not provided for

under other items in the Proposal Form. .

Payment for furnish and Install Water Valve shall be made at the contract unit price per each, shall be S&WB R.D. Wood or American RD Rotating Gate Disc Valve C-500 with adjustable packing in sizes 4 inch through 12 inch. Valves 16 inch and larger shall be American RD gate valves. Payment for the installation of valves shall include furnishing and installing all ductile iron pipe, mechanical joint retainer glands, gaskets, including stainless steel tee bolts and nuts, etc. for a complete installation and any other related or incidental items required to complete this item of work for which separate payment is not provided for under other items in the Proposal Form.

Payment for furnishing and installing Water Main Offset shall be for offsets consisting of four (4) mechanical joint bends complete with retainer glands, stainless steel nuts and bolts and any other related or incidental items required to complete this item of work for which separate payment is not provided for under other items in the Proposal Form, and shall be made at the contract unit price per each. Water line offsets consisting of only two (2) bends will be paid for at one-half (1/2) the unit price bid. Offsets are paid when not indicated on the plans. There is no direct pay for offsets shown on the plans.

Payment for Plug Existing Water Main and Fill With Flowable Material (sand/cement mixture) shall be made at the contract unit price per linear foot, shall include all necessary equipment to completely fill the abandon main with sand/cement and any other related or incidental items required to complete this item of work for which separate payment is not provided for under other items in the Proposal Form.

Payment for Construction of New Water Valve Manholes shall be made at the contract unit price per each, including excavation, granular bedding, foundation slab, manhole casting and cover and backfilling and any other related or incidental items required to complete this item of work for which separate payment is not provided for under other items in the Proposal Form.

Payment for Adjust Complete Meter Box to Grade shall be made at the contract unit price per each, shall include bricks, slates, or similar material to be place under the bottom of the meter box and any other related or incidental items required to complete this item of work for which separate payment is not provided for under other items in the Proposal Form. There shall be no separation between the upper barrel and the lower meter bottom.

Payment for Replace Broken Water Meter Box (5/8" to 1") shall be made at the contract unit price per each, shall include any meter box replacement or any new meter box required and any other related or incidental items required to complete this item of work for which separate payment is not provided for under other items in the Proposal Form. Installation shall be a shown-on S&WB Drawing. No. 7134-W.

All other items of work necessary to the performance of the project for which no specific unit price and/or lump sum pay item is established shall be considered and designated part of the construction and pay items shall be full compensation. Items including but not limited to,

trench safety, traffic control, contract closeout, shop drawings, submittals, and office support shall be merged into the prices bid.

There shall be no direct payment for salvaging existing valves, fire hydrants, manhole castings and covers, etc...

END OF SECTION 3 SECTION 4

TRENCHING, BACKFILLING AND COMPACTION

4-01 GENERAL

4-01.01 SCOPE OF WORK

- A. The Contractor shall furnish all labor, materials, equipment and incidentals required to perform all trenching for installation of pipelines and appurtenances, including dewatering, filling, backfilling, disposal of surplus material, disposal of water removed from the trench, and restoration of trench surfaces and easements.
- B. The Contractor shall be responsible for adequate sheeting, bracing, and shoring systems, and design of the systems. The Contractor shall furnish and place all sheeting, bracing and supports and remove from the excavation all materials that the Engineer may deem unsuitable for backfilling.
- C. The Contractor shall comply at a minimum with the requirements of OSHA excavation safety standards (29 CFR Part 1926.650 Subpart P) and local or State requirements for all excavation, trenching and related sheeting, bracing, etc. Where conflict between OSHA and State or local regulations exists, the more stringent requirements shall apply.
- D. The Contractor shall furnish all materials and equipment and perform all incidental work required to install and maintain a dewatering system for handling ground water or surface water encountered. The Contractor shall assume all responsibility for the adequacy of the methods, materials and equipment employed.

4-01.02 STANDARD SPECIFICATIONS

- A. References to the Louisiana Standard Specifications for Roads and Bridges (LSSRB), shall mean the Louisiana Standard Specification for Roads and Bridges, 2006 edition as issued by the State of Louisiana, Department of Transportation and Development (LADOTD).
- B. References to the Department of Public Works, City of New Orleans, General Specifications for Street Paving (DPWGS), shall mean the Department of Public Works, City of New Orleans, General Specifications for Street Paving, 1999 edition (revised 10/11/2001) as issued by the city of New Orleans Department of Public Works.

4-01.03 <u>SUBMITTALS</u>

- A. Submit the following in accordance with Section 2.20:
 - 1. Prior to beginning any excavation, the Contractor shall submit, to the Engineer, approval certification that the bedding and backfill materials meet these specifications.
 - 2. The Contractor shall submit documentation that the Testing Laboratory meets the following minimum qualifications:
 - A. The Testing Laboratory and supervisory personnel shall have at least five (5) years minimum experience performing required test on Construction Materials in accordance with ASTM E 329-10.
 - B. The Testing Laboratory shall have a State of Louisiana Registered Professional Engineer in Civil Engineering with five (5) years minimum experience in construction material testing as a full time employee of the facility providing the testing services.
 - C. The Laboratory shall have its procedures and equipment inspected at intervals of not more than two (2) years by a qualified national authority such as the Concrete and Cement Reference Laboratory as evidence of its competence to perform the required test.
 - D. For concrete testing, the Laboratory shall comply with the most recent edition of ASTM C1077.
 - E. For soil testing, the Laboratory shall comply with the most recent edition of ASTM D3740.
 - F. A national laboratory accreditation authority must accredit the Laboratory. The Certificate of Accreditation and scope of accreditation must include the appropriate ASTM standards.
 - 3. Written Reports: Testing Laboratory shall submit all test reports to the Contractor and the S&WB.

4-02 PRODUCTS

4-02.01 BACKFILL MATERIAL

Select river sand shall be used as backfill material and shall be a good quality pumped "Mississippi River Sand" free of roots, wood, clay lumps, shells, or any other foreign matter. The backfill material shall meet the requirements of LSSRB 2006 Section 1003.07.

4-02.02 BEDDING MATERIAL

Select river sand shall be used as backfill material and shall be a good quality pumped "Mississippi River Sand" free of roots, wood, clay lumps, shells, or any other foreign matter. The backfill material shall meet the requirements of LSSRB 2006 Section 1003.07.

4-03 EXECUTION

4-03.01 TRENCH EXCAVATION

- A. Trench excavation shall include material of every description and of whatever substance encountered. The length of open trench shall be related closely to the rate of pipe laying.
- B. While excavating and backfilling operations are in progress, traffic flow shall be maintained in accordance with Approved Traffic Control Plans (TCP).
- C. The Contractor shall excavate trenches to the depth and width indicated on the Drawings or as specified herein and shall provide suitable room for installing pipe, appurtenances, sheeting, shoring, bracing, and dewatering facilities. The bottom of the excavations shall be firm and dry and in all respects acceptable to the Engineer.
- D. The Contractor shall accomplish excavation and dewatering by methods that preserve the undisturbed state of subgrade soils. The trench may be excavated by machinery to, or just below the designated subgrade, provided that material remaining in the bottom of the trench is no more than slightly disturbed. Subgrade soils, which become soft, loose, "quick", or otherwise unsatisfactory as a result of inadequate excavation, dewatering or other construction methods shall be removed and replaced by bedding material as required by the Engineer at no additional expense to the Board.
- E. Clay and organic silt soils are particularly susceptible to disturbance due to construction operations. When excavation is expected to end in such soils, the Contractor shall use a smooth-edge bucket to excavate the last one (1) foot of depth.
- F. The Contractor shall cut all stumps, roots, and logs that are encountered within the trench area to a depth of one (1) foot below the bottom of the trench. The Contractor shall fill this excavated space with bedding material. There will be no separate additional payment for stump removal and backfill.

4-03.02 DISPOSAL OF MATERIALS

- A. The Contractor shall stack excavated materials without excessive surcharge on the trench bank or obstructing free access to hydrants and valves. Inconvenience to traffic and adjacent property owners shall be avoided to the utmost extent possible and shall be in accordance with Approved Traffic Control Plans (TCP).
- B. All excavated material which is either unsuitable for backfill or which will not be used for

backfill in the same location shall be removed promptly from the work site same day and disposed off properly by the Contractor.

C. When conditions make it impractical or unsafe to stack excavated material adjacent to the trench, the Contractor shall haul away the material immediately and disposed of properly.

4-03.03 SHEETING AND BRACING

A. The Contractor shall furnish, put in place, and maintain sheeting and bracing required by OSHA, State or local safety requirements to support the sides of the excavation and prevent loss of ground which could endanger personnel, damage the work and/or endanger adjacent structures. Care should be taken by the Contractor to prevent voids outside of the sheeting, but if voids are formed, they shall be immediately filled and compacted by the Contractor.

4-03.04 <u>DEWATERING</u>

- A. The requirements for a stable subgrade are indicated above and the Contractor must adjust his dewatering methods, if in the opinion of the Engineer, the trench bottom is unsatisfactory.
- D. The Contractor shall perform all dewatering without damage to the trench, pavements, pipes, and other utilities. Disposal of water removed from the trench shall in no way adversely affect adjacent property owners or traffic.
- E. The Contractor shall not lay pipe in water.

4-03.05 EXCAVATION BELOW GRADE AND REFILL

- A. Trench dewatering shall be complete and effective regardless of the nature of material encountered or the groundwater conditions.
- B. If the Contractor excavates below grade by error, the Contractor at his own expense shall perform furnishing and placing the refill of bedding material.
- C. If the subgrade is of unsuitable material, the Contractor shall excavate below grade, furnish and place the pumped Mississippi River sand bedding material at the direction of the Engineer.

4-03.06 BEDDING

- A. The Contractor shall deposit pumped Mississippi River sand for pipe bedding, and/or for excavation below grade, directly on the bottom of the trench immediately after excavation has reached the proper depth and before the bottom of the trench has become softened or disturbed by any cause.
- B. The Contractor shall place the pumped Mississippi River sand bedding in layers not exceeding six (6) inches in thickness and compacted to 95% the maximum dry density

in accordance with ASTM D-1557.

- C. The minimum thickness of bedding below the pipe shall be six (6) inches. The bedding material shall extend upward from the excavation bottom along the haunches and sides of the pipe up to a distance of twelve (12) inches above the pipe.
- D. Compaction shall be achieved by mechanical means such as a vibratory plate or other devices approved by the Engineer.

4-03.07 BACKFILLING

- A. Prior to backfilling with pumped Mississippi River sand, the Contractor shall allow the Engineer to examine the trench to insure the bedding material has been installed in accordance with the Contract Documents.
- B. As soon as practical after the pipe has been laid and jointed and bedding material has been installed and compacted, the Contractor shall immediately begin backfilling in lifts of no more than twelve (12) inches.
- C. Where the pipes are laid in areas without a pavement, the Contractor shall fill the remainder of the trench with well compacted pumped Mississippi River sand to match the existing grade or as directed by the Engineer. Where a gravel or similar surface exists prior to excavations, it shall be removed, conserved and replaced to the full original depth as part of the work by the Contractor.
- D. Where the pipes are laid in streets, driveways and sidewalks, the remainder of the trench up to the depth of the bottom of the base course of the specified paving shall be backfilled with pumped Mississippi River sand material as specified herein in layers not to exceed twelve (12) inches mechanically compacted in accordance with DPW and S&WB specifications. Each backfill layer shall be thoroughly compacted as specified herein.
- E. To prevent longitudinal movement of the pipe, dropping or dumping backfill material into the trench will not be permitted.
- F. Backfill shall be brought up evenly on all sides. Each 12 inch layer of backfill shall be uniformly compacted to 95% of the maximum dry density near optimum water content in accordance with ASTM D-1557.
- G. All roadway, driveway and sidewalk surfaces shall be swept and hose-cleaned immediately after backfilling by the Contractor. SWPPP measures shall be employed at all times by the Contractor.

4-03.08 <u>RESTORING TRENCH SURFACE</u>

A. The Contractor shall thoroughly consolidate the backfill and maintain the surface as the work progresses. If settlement takes place, the Contractor shall immediately deposit additional pumped Mississippi River sand to restore the level of the ground to the

original condition.

- B. The surface of any driveway, sidewalk or any other area which is disturbed by the trench excavation, and which is not a part of the paved roadway, shall be restored to a condition at least equal to that existing before work began.
- C. In sections where the pipeline passes through grassed areas, remove and replace the sod.

4-03.09 FIELD TESTING

- A. The Contractor shall employ and pay for services of a Testing Laboratory, meeting the requirements of Section 4-01.03, to perform all testing services required by the specifications to prove compliance with the contract documents, at no direct pay to the Board. All costs associated with failed tests and/or repeat tests shall also be borne by the Contractor.
- B. Where soil material is required to be compacted to a percentage of maximum density, the maximum density at optimum moisture content will be determined in accordance with ASTM D 1557. Field density in-place tests will be performed in accordance with ASTM D 2922.
- C. Where the tests of the bedding or backfill show non-compliance with the required density, the Contractor shall accomplish such remedy as may be required to insure compliance. Subsequent testing to show compliance shall be by a testing laboratory selected by the Contractor and approved by Board and shall be paid for by the Contractor.
- D. Copies of all field test reports shall be submitted to the Contractor and the S&WB Engineer.

4-04 PAYMENT

All items described in this section shall be considered INCIDENTAL NON-PAYMENT ITEMS. They shall be considered and designated a necessary part of the construction, and unit prices bid for items with are connected shall be full compensation for these items and for all labor, materials, and equipment required to complete the items in accordance with the Drawings and Specifications.

END OF SECTION 4

SECTION 5

PAVEMENT RESTORATION

5-01 GENERAL

5-01.01 SCOPE OF WORK

A. The Contractor shall furnish all labor, material, equipment, and incidentals required and remove and replace asphaltic concrete, concrete, or asphaltic concrete over concrete pavement over trenches excavated for the installation of water line replacements, and house connection installations, as specified herein. Unless otherwise approved by the Engineer, the kind of pavement to be constructed in replacement work shall correspond with the kind removed from the area and meet the requirements of the Department of Public Works (DPW) or the Louisiana Department of Transportation and Development (LaDOTD), whichever is applicable.

5-01.02 **GENERAL**

- A. Concrete driveways or sidewalks directly affected during construction or damaged as the result of the Contractor's operation shall be removed and replaced from joint to joint unless otherwise directed by the Engineer.
- B. All damages, as a result of work under this Contract, to existing structures, pavement, driveways, paved areas, curbs, gutters, sidewalks, shrubbery, grass, trees, utility poles, utility pipe lines, conduits, drains, catch basins, stabilized areas, and including all obstructions not specifically named herein, shall be repaired to pre-existing conditions or better and in a manner satisfactory to the Engineer. Bid prices shall include the furnishing of all labor, material, equipment and incidentals necessary for the cutting, repairing, and restoration of the damaged areas unless pay items for specific types of repair are included in the Proposal.
- C. All pavement and roadways, sidewalks, driveways, which are damaged due to construction activities shall be replaced to its pre-construction conditions or better. In cases where a section of roadway to be restored abuts an existing roadway, all transverse or longitudinal joints shall line up and be of the same type as the existing pavement (expansion, or contraction). Pavement restoration shall be considered substantially complete upon completion of all related work such as curing and striping and upon placing the pavement back into beneficial use by the public.
- D. The Contractor shall replace all raised pavement markers and/or plastic pavement markings disturbed during pavement restoration activities.

5-01.03 STANDARD SPECIFICATIONS

A. References to the Louisiana Standard Specifications for Roads and Bridges (LSSRB), shall mean the Louisiana Standard Specification for Roads and Bridges, 2006 edition as issued by the State of Louisiana, Department of Transportation and Development

(LADOTD).

B. References to the Department of Public Works, City of New Orleans, General Specifications for Street Paving (DPWGS), shall mean the Department of Public Works, City of New Orleans, General Specifications for Street Paving, 1999 edition (revised 10/11/2001) as issued by the city of New Orleans Department of Public Works.

5-01.04 SUBMITTALS

- A. Prior to beginning any work involving pavement restoration, the Contractor shall submit, to the Engineer, approval certification that the following materials meet these specifications.
 - 1. Pavement subbase course material
 - 2. Pavement base course material
 - 3. Asphaltic concrete mix design
 - 4. Concrete mix design
 - 5. Handicap ramp tactile/detectable cast-in-place tiles

5-02 PRODUCTS

5-02.01 PAVEMENT SUBBASE COURSE

All materials under this subsection shall conform to LSSRB Section 1003.07 and DPWGS Section C302.03 (a).

5-02.02 PAVEMENT BASE COURSE

All materials under this subsection shall conform to LSSRB Section 1003.03(d) and DPWGS Section C302.03 (e).

5-02.03 ASPHALTIC CONCRETE

- A. The asphaltic tack coat shall be a modified asphalt emulsion (Grade SS-1, SS-1H or CMS-2) or a modified asphalt emulsion (Grade CRS-2P, CRS-2L, SS-1P or SS-1L) conforming to LSSRB Section 1002 / DPWGS Section C504.02.
- B. The asphaltic prime coat shall be cutback asphalt Grade MC-30, MC-70 or AEP Emulsified Asphalt conforming to LSSRB Section 1002 / DPWGS Section C505.02.
- C. The asphaltic concrete binder course mix shall be type 3, wearing course mixes shall be type 3 and the base course shall be type 5A all meeting the requirements of LSSRB Section 501 / DPWGS Section C501 unless otherwise specified herein. The asphaltic concrete mixes shall be designed, constructed and tested according to LSSRB Section 501 / DPWGS Section C501.

- Aggregates shall meet the requirements of LSSRB Section 501.02(c), Table 501-3 and Section 1003.06 / DPWGS Section C501.02(c), Table 1 and Section C1003.06.
- 2. Use of recycled asphalt in asphaltic concrete mixes is not allowed. Use virgin materials only with aggregate size suitable to the application.

5-02.04 CONCRETE PAVEMENT, CURBS AND GUTTERS

- A. Reinforcing Steel shall conform to LSSRB Section 1009 / DPWGS Section C601.04 (g) on page 79.
- B. Concrete shall be Portland cement concrete Class B meeting the requirements of LSSRB Section 901 / DPWGS Section C601.
- C. Joint filler and sealants shall conform to LSSRB Sections 1005.01 and 1005.02.

5-02.05 <u>INTERIM ASPHALT PAVEMENT</u>

INTERIM asphalt pavement shall be the same mix as asphalt wearing course, be a minimum of two (2) inches thick, and be placed over 6" lime stone/crushed concrete base.

5-02.06 <u>INCIDENTAL PAVING</u>

Concrete shall be Portland cement concrete Class M meeting the requirements of LSSRB Section 901.

5-02.07 HANDICAP RAMP TACTILE/DETECTABLE CAST-IN-PLACE TILES

- A. All materials under this section shall conform to the Americans with Disabilities Act (Title 49 CFR TRANSPORTATION, Part 37.9 STANDARDS FOR ACCESSIBLE TRANSPORTATION FACILITIES, Appendix A, Section 4.29.2, DETECTIBLE WARNINGS ON WALKING SURFACES) and revisions to date, unless otherwise specified.
- B. Handicap ramp tactile/detectable tiles shall be Armor-Tile as manufactured by Engineered Plastics Inc., Tel: 800-682-2525, or approved equal. Vitrified Polymer Composite (VPC) cast-in-place tiles, 24" by 24," shall be an epoxy polymer composition with an ultra violet stabilized coating employing aluminum oxide particles in the truncated domes. The tile shall incorporate an in-line dome pattern of truncated domes 0.2" in height, 0.9" diameter at the base, and 0.4" diameter at top of dome spaced 2.35" nominal as measured on a diagonal and 1.70" nominal as measured side by side. For wheelchair safety, the field area shall consist of a non-slip surface with a minimum of 40 90° raised points 0.045" high, per square inch.
- C. Yellow color shall be homogeneous throughout the tile.

5-02.08 RAISED PAVEMENT MARKERS AND PLASTIC PAVEMENT MARKINGS

A. All materials under this subsection shall conform to LSSRB Section 731 or 732 / DPWGS Section C731 or C732.

5-03 EXECUTION

5-03.01 <u>GENERAL</u>

- A. The new pavement shall be placed, shaped, compacted, and finished to establish grade and cross section by practicable means that will result in a dense, uniform textured surface. Abutting edges of old pavement shall be trimmed of all loose fragments and shall be painted with an appropriate bonding agent to provide a good bond between the old and new pavement.
- B. All existing concrete curb, walks, and driveways shall be replaced with concrete to the line and grade as directed by the Engineer to match pre-existing thickness. Prior to construction in an area, the Contractor shall adequately reference the existing curb and other pavement elevation to establish the preconstruction elevation.
- C. The elevation of restored pavement shall correspond to the pre-existing elevations established prior to construction in the area or as modified by the Engineer, to allow for proper drainage.
- D. The Contractor shall repair or replace broken or defective pavement, as directed by Engineer.
- E. Removal and replacement shall be generally within the limits of the excavation area. Removal and replacement outside the limits of the excavation area shall be undertaken to adequately accomplish the intended restoration. However, such work shall only be undertaken as approved or directed by the Engineer.
- F. The pavement surface shall conform generally to the grade and cross slope required and be free from being torn, gouged, shaved, broken or excessively grooved.
- G. The gutter line of the roadway shall be adjusted for smooth flow of surface run-off to the nearest drainage inlet.

5-03.02 SPECIAL PAVING REQUIREMENTS

- A. All work to be performed under this Subsection shall be conducted with regard for public safety and maintaining traffic flow. The Contractor is responsible for maintaining access to the residents and businesses of the area by installing temporary roadways, driveways and sidewalks and shall inconvenience the affected property owners as little as possible.
- B. At no time shall the Contractor have more than 10 excavated repair sites open (awaiting temporary restoration). The Contractor may be notified by the Engineer to stop all excavation work until this provision is met.

- C. The Contractor shall complete final pavement restoration within 15 days after completion of water line replacement. The Contractor may be notified by the Engineer to stop all other work until this provision is met.
- D. The Contractor shall complete interim pavement restoration within 15 days after completion of backfilling unless otherwise permitted in writing by the Engineer. The Contractor may be notified by the Engineer to stop all other work until this provision is met.
- E. At the time of placing the pavement, excess foundation material shall be removed and disposed of in a satisfactory manner. Paving of any slab shall be completed on the day it is started and the area shall be placed in service at the earliest possible time.

5-03.03 <u>CUTTING OF PAVEMENT</u>

- A. The Contractor shall remove concrete, asphaltic concrete, or asphaltic concrete over concrete pavement for the trench. Saw cutting shall be required along the entire limits of the removed pavement areas, at no direct pay.
- B. Saw cuts shall be clean, vertical cuts made true to lines parallel to or at right angles to any existing curb line. Depths of the cuts shall be sufficient to permit the removal of pavement between or alongside them without damage to pavement or structures to be left in place. Any pavement damaged outside of the trench limits by the Contractor's operation shall be replaced at the Contractor's expense.
- C. Curbs and sidewalks shall be removed to the nearest joint scorings.

5-03.04 ITERIM ASPHALT PAVEMENT

- A. To provide for the comfort and safety of the traveling public, the Contractor shall install interim asphaltic concrete pavement. It is the Contractor's responsibility to backfill and place interim asphaltic concrete pavement over all completed water lines in streets within fifteen (15) days after completion of backfilling, unless otherwise directed in writing by the Engineer.
- B. Compaction Test requirements stated in this Subsection will be required for interim pavements. Maintenance shall consist of repairing the temporary asphaltic concrete pavement surface material and of restoring said surface to proper grade and cross section as directed by the Engineer.
- C. The Contractor shall install and maintain interim asphaltic concrete pavement in the roadways over the excavated areas for a minimum of 365 days after completing the backfill. The interim pavement shall be compacted and maintained in a safe and level condition until City of New Orleans Department of Public Works restores the pavement. All surface irregularities that are dangerous or obstructive to traffic are to be removed.

5-03.05 PAVEMENT SUBBASE COURSE

- A. The pavement subbase shall be furnished and placed as specified herein. The subbase shall be compacted to 95% of the maximum dry density near optimum water content in accordance with ASTM D 1557.
- B. The Contractor will not be allowed to install the pavement base course until the subbase material in the trench area meets or exceeds the density requirements.

5-03.06 PAVEMENT BASE COURSE

- A. The pavement base course shall be placed in trenched areas in accordance with applicable provisions of LSSRB Sections 302.03, 302.04, 302.05(d), 302.06, 302.07, 302.08, 302.09(a) and 302.10 and 302.11.
- B. The Contractor shall not be allowed to restore the pavement until backfill material in the trench area meets or exceeds the density requirements. The base course shall be compacted to 95% of the maximum dry density in accordance with ASTM D-1557.
- C. It will be the Contractor's responsibility to fill void areas in the existing road base material with compacted base material to establish a level uniform surface.

5-03.07 <u>ASPHALTIC PAVEMENT</u>

- A. All equipment, tools and machines used in the performance of work covered by this section shall be in accordance with LSSRB Section 503 / DPWGS Section C503 and subject to the approval of S & W B
- B. Paving operations shall proceed in accordance with LSSRB 2006 edition, Section 501.04 / DPWGS Section C501.04 unless otherwise directed by the S & W B.
- C. The surface to be covered shall be swept clean of dust, dirt, caked clay, caked material and loose material by revolving brooms or other mechanical sweepers supplemented with hand equipment as directed and in accordance with LSSRB Section 501.05 / DPWGS Section C501.05.
- D. Applying Liquid Asphalt Materials.
 - 1. <u>Asphaltic Prime Coat.</u> An asphaltic prime coat shall be applied in accordance with LSSRB Sections 505.03, 505.04, 505.06 and 505.07 or DPWGS Sections C505.03, C505.04, 505.05 and C505.06 and C505.07 between the asphalt course base and the stone base course the binder and the wearing courses.
 - 2. <u>Asphaltic Tack Coats.</u> An asphaltic tack coat shall be applied in accordance with LSSRB Sections 504.03, 504.04, 504.5, and 504.06 / DPWGS Sections C504.03, C504.04, C504.5, and C504.06 between the binder and the wearing courses.

- E. Hauling, paving and finishing shall be in accordance with LSSRB Section 501.07 / DPWGS Section C501.07 unless otherwise directed by the Engineer.
- F. After placement, mixtures shall be uniformly compacted in accordance with LSSRB Section 501.08 / DPWGS Section C501.08 unless otherwise directed by the Engineer.
- G. A roller compactor shall be used on all restoration sites. At restoration sites greater than or equal to 8-feet in width or greater than or equal to 20-feet in length, or as directed by the Engineer, an asphaltic concrete spreader and roller compactor shall be used to spread and compact hot mix asphaltic concrete.

5-03.08 CONCRETE PAVEMENT

- A. Portland Cement concrete pavement shall be installed in accordance with LSSRB Section 601 / DPWGS Section C601.
- B. The final roadway surface finish shall be a "Drag Finish" as defined by LSSRB or as otherwise directed by the Department of Public Works.
- C. The pavement shall be opened to traffic according to LSSRB Section 601.17 / DPWGS Section C601.17 unless otherwise directed by the Engineer.
- D. White impregnated curing compound shall be sprayed on all concrete sidewalks, driveways, curbs and roadways. This requirement also applies to placement on asphaltic concrete repair sites.
- E. All joints in roadway surface shall be cleaned and sealed with approved joint sealant.

5-03.09 <u>CURBS, GUTTERS AND MISCELLANEOUS</u>

- A. Portland Cement curbs and gutters shall be installed in accordance with LSSRB Section 707 / DPWGS Section C707.
- B. Replacement of curbs, gutters, walks, dikes, and other like structures shall consist of similar and matching construction to that of adjoining undisturbed structures, which construction shall be at least equal in all respects to that of the structures or parts of structures removed in the work and as shown on the Drawings.
- C. There is a possibility that multiple curbs shall require leveling outside of the limits of construction to present a uniform appearance. This shall be at the discretion of the Engineer and will require prior approval before restoration commences.
- D. The installation of handicapped ramps shall be in accordance with DPW Standard Drawing. Tactile/detectable tiles shall be placed true and square to the curb edge and tamped or vibrated into the fresh concrete in accordance with the manufacturer's guidelines and shall be flush with the surrounding concrete within 1/16 of an inch.

5-03.10 ROCK ROADS AND WALKS

All existing rock roads, driveways, walks, and shoulders removed shall be replaced to the same lines and grades with base course material to a compacted thickness of six inches (6") or the thickness of the removed surfacing, whichever is greater.

5-03.11 ADJUSTMENT OF FRAMES AND COVERS

- A. All manholes within concrete paving areas shall be isolated (boxed out), at no direct pay, by means of an approved circular, square, or rectangular ring as directed by the Engineer.
- B. Raise and adjust all manholes, catch basin frames, gate valves, water meters and any other pavement penetrations to the finished elevation of the new pavement. All raised appurtenances shall be grouted with concrete or otherwise as approved by the Engineer to firmly support them flush with the surface of the new pavement.
- C. Adjustment of drainage catch basins shall be performed, as directed by the Engineer, in accordance with DPWGS Section C702.

5-03.12 COLD MILLING ASPHALTIC PAVEMENT

- A. Equipment for cold milling asphaltic surfacing shall be in accordance with LSSRB Section 509.02 / DPWGS C509.02 and subject to the approval of the Engineer.
- B. Construction requirements for cold milling asphaltic pavement shall be in accordance with LSSRB Section 509.03 / DPWGS C509.03 unless otherwise directed by the Engineer.
 - (1) Except when milling reaches to the existing concrete base layer, the surface tolerance requirements of the cold milled surface shall meet the requirements for binder course in LSSRB Section 501 / DPWGS Section C501.

5-03.13 MINIMUM TESTING REQUIREMENTS

- B. The Contractor shall employ and pay for services of a Testing Laboratory, meeting the requirements of Section 4-01.03, to perform all testing services required by the specifications to prove compliance with the contract documents, at no direct pay to the Board. All costs associated with failed tests and/or repeat tests shall also be borne by the Contractor.
- C. Asphaltic Concrete Pavement Roadways
 - 1. One base thickness verification per 300 square yards or fraction thereof.
 - 2. One density test on the sub-base (if applicable) and base material per 300 square yards or fraction thereof.
 - 3. One pavement core for thickness verification per 300 square yards of pavement or fraction thereof.

4. Temperature on all asphaltic concrete trucks.

C. Concrete Roadways

- 1. One slump test minimum per 100 square yards of concrete or fraction thereof.
- 2. Four (4) cylinders minimum per 100 square yards of concrete or fraction thereof.
- 3. Independent densities, slumps, cylinders, cores, etc. will be required for isolated areas.
- 4. The Engineer may request any number of additional tests.
- D. There will be no adjustment in bid prices for pavement thickness deficiencies. If the pavement core thickness is less than specified, two additional cores on the same slab within a five-foot (5') radius must be taken.
 - 1. If one of the additional core's thickness is less than specified, then the entire panel (joint to joint) must be removed and additional cores on other adjacent panels within the core range (300 square yards) must be taken and the same procedure followed.
 - 2. If both of the additional core's thickness is equal to or greater than specified, the Contractor shall either remove and replace the pavement or overlay the entire street width in the deficient area, adjusting any utility appurtenances within the affected pavement limits, with a minimum 2 inches (2") of asphaltic concrete at no additional expense to the Board.

5-03.14 PAVING SCHEDULE

Paved Surface	Material	Thickness
1. Streets	Portland Cement Concrete with 6 x 12 – 0/1 mesh	8" concrete w/6 x 12-0/1 mesh 8" stone base or approved equal (Compacted to 95% Maximum Dry Density)
2. Streets	Asphaltic Concrete	2" wearing course 3 1/2" binder course 12" stone base (Compacted to 95% Maximum Dry Density)
3. Driveways	Portland Cement w/ 6 x 12 - 0/1 mesh	6" concrete 6"sand subbase (Compacted to 95% Maximum Dry Density)
4. Sidewalks	Portland Cement	4" concrete

(Residential)	w/ 6 x 6 - No. 6 mesh	6" sand subbase (Compacted to 95% Maximum Dry Density)
5. Sidewalks (Commercial)	Same as Driveways	Same as Driveways above
6. Street milling (Cold Milling and overlay)	Asphaltic Concrete	2" Minimum cold milling 2" Minimum wearing course

A-03.15 RAISED PAVEMENT MARKERS AND PLASTIC PAVEMENT MARKINGS

A. Installation of raised pavement markers and plastic pavement markings shall be in accordance with LSSRB Section 731 or 732 / DPWGS Section C731 or C732.

5-04 PAYMENT

Payment for Asphaltic Pavement Restoration, (5 ½") Minimum shall be made at the unit price bid per square yard and in accordance with these Specifications contained herein. Price and payment shall be full compensation for material, labor, equipment, demolition, excavation, disposal of excavated material, base material, compaction, traffic control and devices, cold-milling only for the purpose of obtaining a smooth transition between existing and new surfaces, identification tags, and any other related or incidental items necessary to complete the work for which separate payment is not provided for under other items in the Proposal Form.

Payment for Interim Asphaltic Pavement Restoration (2") Minimum shall be made at the unit price bid per square yard of interim asphalt placed in accordance with these Specifications and shall include 6 inches compacted base. Price and payment shall be full compensation for material, labor, equipment, saw cutting, excavation, disposal of excavated material, base material and compaction, temporary pavement marking, traffic control and devices, and any other related or incidental items necessary to complete the work for which separate payment is not provided for under other items in the Proposal Form.

Payment for Reinforced Concrete Pavement Restoration shall be made at the unit price bid per square yard and in accordance with these Specifications. Price and payment shall be full compensation for material, labor, equipment, saw cutting, demolition, excavation, disposal of excavated material, base material and compaction, traffic control and devices, and any other related or incidental items necessary to complete the work for which separate payment is not provided for under other items in the Proposal Form.

Payment for Asphaltic Pavement on Concrete Paved Roadways (1 1/2") Minimum shall be made at the unit price bid per square yard of asphalt placed in accordance with these

Specification. Price and payment shall be full compensation for material, labor, equipment, saw cutting, excavation, disposal of excavated material, base material and compaction, temporary pavement marking, traffic control and devices, and any other related or incidental items necessary to complete the work for which separate payment is not provided for under other items in the Proposal Form.

Payment for concrete paved sidewalks and driveways shall be made at the unit price bid per square yard of sidewalks and driveways in accordance with these specifications. Price and payment shall be full compensation for material, labor, equipment, saw cutting, excavation, disposal of excavated material, base material and compaction, temporary pavement marking, traffic control and devices, and any other related or incidental items necessary to complete the work for which separate payment is not provided for under other items in the Proposal Form.

Payment for Concrete Curb Restoration shall be made at the unit price bid per linear foot and in accordance with these Specifications. Price and payment shall be full compensation for material, labor, equipment, saw cutting, demolition, excavation, disposal of excavated material, base material and compaction, traffic control and devices, and any other related or incidental items necessary to complete the work for which separate payment is not provided for under other items in the Proposal Form.

Payment for Reset Granite Curbs shall be made at the unit price bid per linear foot of Granite Curb in accordance with these specifications. Price and payment shall be full compensation for material, labor, equipment, saw cutting, excavation, disposal of excavated material, base material and compaction, temporary pavement marking, traffic control and devices, and any other related or incidental items necessary to complete the work for which separate payment is not provided for under other items in the Proposal Form.

Payment for Handicap Ramp Restoration/Installation shall be made at the unit price bid per each and in accordance with these Specifications and DPW Standard Drawings. Price and payment shall be full compensation for material, labor, equipment, demolition, excavation, disposal of excavated material, base material and compaction, traffic control and devices, and any other related or incidental items necessary to complete the work for which separate payment is not provided for under other items in the Proposal Form.

Payment for Batture Sand and Grass Sod shall be made at the unit price bid per square yard and in accordance with these Specifications. Price and payment shall be full compensation for material, labor, equipment, and topsoil, to furnish, install and maintain sod in accordance with these Specifications.

END OF SECTION 5

SECTION 06 GEOSPATIAL INFORMATION SERVICES (GIS)

6-1 GENERAL

The Board has developed an ESRI based Enterprise GIS to manage its utility infrastructure data. This GIS has certain quality and format requirements which must be adhered to including GPS positional accuracy and data format. Bidders must demonstrate the ability to meet these requirements. The Contractor must maintain these requirements continuously throughout the contract period unless otherwise specifically excluded, in writing, by the Engineer.

6-2 GPS LOCATIONS – EQUIPMENT

Positional accuracy is important to The Board. All utility feature inspections should include the capture of GPS positional data. The Board requires the use of "Mapping Grade" GPS equipment capable of sub-foot or better horizontal precision after differential post-processing or through the use of real time kinematics. The Board requires:

- Trimble GPS receivers and/or Data collectors or equivalent
- A minimum of 20, 1-second positions must be captured using TerraSync[™] or equivalent Software and post-processed using Trimble Pathfinder Office Software or required equivalent.
- Differential post-processing must include a minimum of 3 Base stations within 100Km of the project site.
- Provided GPS data must include, at a minimum, the Receiver Type, GPS Date and Time, Filtered and Unfiltered Number of Positions, Horizontal Precision, and Northing and Easting Coordinate pairs relative to The Board's Enterprise GIS coordinate projection.

The GPS data collection equipment make, models, serial numbers and manufacturer's specification sheet including positional capabilities, as well as the names and versions of data collection and differential post-processing or Real Time Kinematics software and a detailed description of the methodology which will be used to meet these requirements must be submitted as part of this bid.

6-3 GPS LOCATIONS - DATA FORMAT

GPS data must be collected with sub foot accuracy and delivered in the coordinate projection parameters provided or defined by the Engineer. In addition 'metadata' describing the equipment and post processed accuracy for each inspection and/or collected feature point must be provided. This metadata is to accompany the feature's GIS inspection data format as GIS Related Table(s) and submitted with the inspection GIS. These GIS deliverables must be prepared and submitted in compliance with the following version and format specifications:

- Version: All deliverables must be upward and/or backward compatible with the current version of ESRI's ArcGIS solutions, data and software employed on The Board's network. No submittals prior than (version 10.1) will be accepted.
- **Format**: Only geodatabase structured data will be accepted. Within this format one or more of the following conditions will be adhered to:
 - The Board will furnish existing geodatabase format data model schema via geodatabase file and data will be returned in the same.

- If furnished and specifically delineated, existing geodatabase (Feature Class and/or Related Table) format data model schema will be followed and populated. Any recommendations for changes or additions to this geodatabase data model schema must be presented in writing and will be accepted only with approval from the Engineer prior to data deliverables.
- If no existing geodatabase data model schema is furnished by The Board data deliverables will be structured as follows with the approval of the Engineer:
- Feature Class: A geodatabase Feature Class will be designed and developed to hold vital feature information relative to the contracted activities. Specifically a Feature Class will contain Identification, location, Feature specific static data.
- **Identification** must include GIS ID (from board provided maps or GIS data).
- **Location** may include Street Address, Location Description, or other informative data, in addition to GPS data, to allow The Board to easily identify features.
- **Feature-specific** static data must be included such as, but not limited to: Latitude, Longitude and Elevation of Manhole casing, Pipe Invert elevation, Pipe Diameter, Pipe Material, Restoration Latitude and Longitude.
- **Related Table(s):** In addition to the required Feature Class, Related Tables may be required and/or included in deliverables. Related tables generally contain dynamic 'condition' data related to the Features being inspected. These data are connected within the geodatabase using Relationship Classes which link Dynamic data to Static feature data using a unique (primary) key such as the Unique GIS ID.

6-4 DATA DELIVERABLE SCHEDULE

GIS data deliverables must be prepared and submitted with each invoice or as directed by the Engineer. GIS data deliverables shall be required as supporting documentation for any work performed during an invoicing period.

6-5 PAYMENT

There shall be no direct pay for collecting and submitting the GIS data deliverable. These services shall be included in the unit costs.

ECONOMICALLY DISADVANTAGED BUSINESS PARTICIPATION SUMMARY SHEET

Minimum Percentage Goal Participation for this Contract is _36___%

Contract 2158 - Water Main Point Repairs, Water Service Connection, Water Valve and Fire Hydrant Replacement at Various Sites Throughout Orleans Parish

Name and Address of Disadvantaged Business Enterprise Company	Name of Contact Person	Scope of Work to be Performed	Dollar Amount of work to be performed	Percentage of Dollar Amount to Total Bid Price

THIS FORM MUST BE COMPLETED AND SUBMITTED BY THE TWO LOWEST NUMERICAL BIDDERS, <u>ALONG WITH SIGNED CORRESPONDENCE FROM SLDBE(S)</u> ON THEIR OWN LETTERHEAD REAFFIRMING NEGOTIATED TERMS, NO LATER THAN 3 DAYS AFTER THE BID OPENING (EXCLUSIVE OF SATURDAYS, SUNDAYS AND HOLIDAYS). FAILURE TO DO SO WILL RENDER THE BID NON-RESPONSIVE.

BY SUBMITTAL OF THIS FORM, PRIME CONTRACTOR ACKNOWLEDGES THAT DBE(S) HAVE BEEN CONTACTED AND A FIRM PRICE HAS BEEN OBTAINED.

NOTE: Signature required even if judged NOT APPLICABLE by the BIDDER

Prime Representative Name:	Prime Signature:
Print Name	Signature
Prime Company's Name:	Date:
Prime Address:	E-mail:
	Telephone Number:

For Construction Projects Revised March 6, 2018

DISADVANTAGED BUSINESS ENTERPRISE PROGRAM

In accordance with the adoption of Resolution R231-97, the Sewerage and Water Board of New Orleans has established a race and gender-neutral Disadvantaged Business Enterprise (DBE) Plan. The prime contractor shall be required to make a demonstrated good faith effort to award (36)% of the amount of the contract to certified disadvantaged business enterprises as **subcontractors or suppliers performing commercial useful functions which are consistent with the work required on this contract.** The percent participation having been determined for this specific contract by recommendation of the **Construction Review Committee** (**CRC**), which is a joint effort of representatives from the City of New Orleans, Sewerage and Water Board, and representatives of local contractor organizations. This percentage requirement shall be considered an informality which is subject to modifications and may be waived or adjusted by the Sewerage and Water Board of New Orleans if the prime contractor, after having demonstrated a good faith effort, is unable to comply with the requirement.

DEMONSTRATED GOOD FAITH EFFORTS

Before receiving an award of the contract, the contractor must meet the DBE goals or prove that he/she has made a demonstrated good faith efforts. To determine whether a particular contract bidder has made demonstrated good faith efforts to reach the DBE participation goal, the Board and its staff will consider the following:

- **a.** whether the contractor attended all pre-bid meetings that may have been scheduled by the Board to inform DBE firms of subcontracting opportunities and/or requested the Board Directory of Certified DBE firms;
- b. whether the contractor advertised in general circulation and trade association publications, concerning the DBE subcontracting opportunities, and allowed the subcontractors reasonable time to respond;
- whether the contractor provided written notice to a reasonable number of individually named DBE firms and allowed sufficient time for the DBE firms to participate effectively;
- **d.** whether the contractor followed up initial solicitations of interest by contacting DBEs to determine with certainty whether the DBEs were interested in bidding;
- e. whether the contractor selected specific portions of the work to be performed by DBEs in order to increase the likelihood of meeting the DBE goals (including breaking down contracts into smaller units to facilitate DBE participation);
- **f.** whether the contractor provided interested DBEs with adequate information about the plans, specifications and requirements of the contract;
- g. whether the contractor negotiated in "good faith" with interested DBEs and did not reject DBEs as unqualified without sound reasons based on a thorough investigation of their capabilities;
- **h.** if the contractor did reject a DBE as unqualified, the contractor must state his or her reason for doing so in writing;

- i. whether the contractor has used the services of available community organizations and small and/or disadvantaged business groups; local, state and federal small or disadvantage business assistance offices; and other organizations that provide assistance in the recruitment and placement of DBE firms;
- **j.** whether the contractor has made sufficient efforts to negotiate with DBEs for specific subbids, including at a minimum:
 - (1) names, addresses, telephone numbers of DBEs that the contractor contacted,
 - (2) a description of information provided to those DBE firms, and
 - a statement of why additional agreements with DBEs were not reached to include but not limited to proof the DBEs' price exceeded that of non-DBEs.

1. Policy:

It is the policy of the Board that DBE firms, as defined in the Board's Disadvantaged Business Enterprise Plan, shall have the maximum allowable opportunity to compete for the award of the participation in the performance of the Board's publicly bid contracts. Consequently, the CRC and the Board have set the DBE participation goal applicable to this construction contract.

2. DBE Obligation:

The Board and its contractors agree to ensure that DBE's, as defined in the Board's Disadvantaged Business Enterprises Plan, shall have the maximum allowable opportunity to compete for the award of the participation in the performance of contracts and subcontracts provided under this agreement. In this regard, contractors shall take all necessary and reasonable steps in accordance with this DBE Plan to ensure that DBE's have the maximum allowable opportunity to compete for such contracts. The Board and its contractors shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of the Board's publicly bid contracts.

3. Utilization of DBE Vendor Listings:

All bidders are required to utilize the most recent Sewerage and Water Board State-Local Disadvantaged Enterprise Vendor Listings for Business Program Approved Construction, Goods Services/Professional Services, in their selection of DBE entities to meet DBE participation goals. Bidders are required to utilize DBE's as subcontractors or suppliers only in the areas for which they are certified. A description of the areas of work that DBE's can provide is contained in these vendor listings. In addition, an alphabetical list of vendors/contractors is provided indicating the name of the company, address, name of owner, telephone number, fax number, the date the company became certified, and a description of the work that these entities are certified to perform. Companies that are already certified as a DBE cannot fulfill the DBE requirements by listing themselves as the subcontractor to meet the DBE goal. The prime contractor shall select another DBE from the Sewerage and Water Board's Approved Vendor Listing.

4. Contacting DBE's and Obtaining a Firm Price

All prime contractors are required to contact DBE's and obtain a firm price before listing the DBE's on the Participation Summary Sheet. As confirmation of established contact, bidder will include with their Participation Summary Sheet submission a signed correspondence from the SLDBE subcontractor on their own letterhead that reaffirms negotiated terms such as scope of work and monetary compensation.

5. Failure to Comply with DBE Bid Specifications:

All bidders for this Board contract are hereby notified that failure to comply with the above DBE specifications may constitute the bid as being non-responsive, and sufficient cause for rejection.

6. Failure to Carry Out DBE Policy:

All bidders, potential contractors, or subcontractors for this Board contract are hereby notified that failure to comply with the DBE policy and DBE obligations, set forth above, shall constitute a breach of contract which may result in termination of the contract or such other remedy as deemed appropriate by the Board, to include excluding bidder from bidding on future Board contracts.

7. <u>Setting Minimum Participation Goals:</u>

The stated minimum percentage DBE participation goal recommended by CRC and approved by the Board applies to the work of this contract. The two lowest numerical bidders must complete and submit a DBE Participation Summary Sheet no later than three (3) days after the bid opening (excluding Saturdays, Sundays and holidays). The DBE Participation Summary Sheet should be completed properly, showing that at least the percentage goal of the total contract bid price will be subcontracted or otherwise awarded through procurement action to DBE's. Should the bidder fail to comply with this request, the bid shall be considered unresponsive, unless:

- **a.** An affidavit is furnished by the bidder with its bid showing that the DBE goals cannot be met for the following reasons:
 - (1) No DBE firms made offers. Here, it must be shown, documented and demonstrated that good faith efforts (as defined in Part III, D, 2. of the Board's DBE plan) were made by the bidder to obtain the participation of DBE firms and that they did not respond, or
 - (2) The DBE offers made and accepted for subcontract and/or material supplies do not total the stated goal for participation, but total a lesser percentage, and
 - (3) The bidder was unable to obtain DBE further participation, despite his or her demonstrated good faith efforts (as defined in Part III, D, 2 of the Board's DBE Plan) to obtain additional participation by DBE firms.

b. Each of the assertions made by the bidder must be supported by documentary evidence.

8. Other Clauses Unaffected:

Nothing contained herein shall invalidate, change, annul, release, restrict, or affect the liability on the bonds or insurance given by the contractor, or the time required for completion of the contract.

9. <u>Determination of Efforts to Meet Goals:</u>

Initial determination of bidder efforts to meet the DBE participation goal shall be based on the DBE participation representations submitted by the two lowest numerical bidders no later than three (3) days after the bid opening (excluding Saturdays, Sundays and holidays). Bidders shall submit all the forms required herein no later than three (3) days after the bid opening (excluding Saturdays, Sundays and holidays), and the DBE Office will examine the contents thereof. The Board's DBE Officer may, if deemed advisable, request further information, explanation or justification from any bidder.

10. <u>Contract Monitoring</u>:

- a. The Board's DBE Office will monitor contractor during the operation of the contract to ensure that the contractor meets all of its DBE obligations as specified in the contract bid. The Board's DBE office shall establish rules and regulations, to be approved by the Board, for the ongoing monitoring of contractor compliance.
- b. Disadvantaged Business Enterprise Program Office personnel or their designated representative shall be allowed to conduct periodic monitoring of contractors' compliance with the agreed to Disadvantaged Business Enterprise Program participation requirements. Contractors shall be required to complete and return to the Disadvantaged Business Enterprise Program Office in the time required all requests for information and data relative to the contractors' activities in meeting the required Disadvantaged Business Enterprise participation goal. Additionally, Disadvantaged Business Enterprise Office personnel or their designated representative shall have access to contractor and subcontractor(s) records pertaining to, but not specifically limited to labor, costs and materials supplied and used on the Board contract, as well as inspection and photocopying of any and all contracts, agreements and correspondence relative to the Disadvantaged Business Enterprise contract participation requirements. Such inspection will be performed during normal business hours and will be conducted in such a fashion so as to minimize interference with production of the contract. Visits may be made to job sites, as well as to administrative offices of the contractor and subcontractor(s) participants. Such inspection and on-site visits may be scheduled with or without prior notice to the contractor or Disadvantaged Business Enterprise subcontractor participant. Contractors' failure to comply with these monitoring requirements may result in termination of the contract or such other remedy as deemed appropriate by Board.

11. Maintaining Records:

Subsequent to the completion of a contract, contractors are required to maintain for three (3) years such records as are necessary to determine compliance with their DBE obligations. During construction, or

performance of the DBE obligations, contractors shall submit reports as requested to enable the DBE Office to monitor this compliance.

12. <u>Umbrella Bonding:</u>

On contracts where subcontracting exists and where practicable (i.e., when a substantial risk or financial hardship would not be incurred by the prime contractor), the contractor may use an umbrella bond to encompass the DBE firm.

13. Board Action to Seek Compliance:

The contractor consents to such appropriate actions taken to ensure that prime contractors and subcontractors comply with the DBE provisions, to include but not limited to:

- **a.** desk audits to review all material, and information concerning the contractor's compliance;
- **b.** on-site reviews that may include interviews, visits to project locations, and inspection of documents and/or information not available at the desk audit that pertains to the contractor's compliance;
- c. any additional investigation that may be called for by a lack of proper record keeping, failure of the prime contractor to cooperate; failure of DBEs to cooperate; visible evidence unsatisfactory performance; other evidence as may warrant further investigation.

14. Non-Compliance Finding:

The Board staff will make compliance determinations regarding its prime contractors. Documentation of noncompliance will include the specific areas in which the contractors failed to comply. In these instances, appropriate legal action consistent with the DBE and other contract provisions will be taken.

15. <u>Contractor's Duties</u>

a. Record Keeping

Successful bidders shall establish and maintain records and submit regular reports to the DBE office as required, which will identify and assess progress in achieving DBE subcontract goals and other DBE participation efforts.

b. Failure To Comply With EDBP Participation Requirements

Failure to comply with any of the EDBP requirements of this contract shall constitute a violation of the terms and conditions of this contract and a cause for the termination of the contract at the option of the Board.

Such violations shall include, but not limited to:

Failing to meet the percentage participation requirements as set out in the contract documents.

Failing to use certified EDBP contractors/vendors in performing the scope of work as identified in the contract documents (EDBP participation summary sheet).

Failing to comply with the "monitoring of EDBP requirements" included herein as part of the contract, such as contractors:

Failure to submit quarterly report and any other necessary reports timely and adequately as required by the EDBP Office.

Failure to grant access to contractor/subcontractor records by EDBP Office personnel, and

Failure to allow on-site investigations and visits, etc.

Failing to report the removal or termination of a certified EDBP vendor /subcontractor.

Failing to secure authorization for replacement of certified EDBP subcontractors from the Director of the Economically Disadvantaged Business Program.

In Lieu of termination the Board, through the EDBP Office, may impose the following penalties:

Withhold from the contractor in violation up to 10% of all future payments due to the contractor, until such time as the violations have been corrected.

Withhold from the contractor in violation, all future payments until such time as the violations have been corrected.

c. Subcontract Clause

All bidders and potential contractors must assure the Board that they will include the above clauses in all agreements, which offer further subcontracting opportunities.

d. Contract Award

Bidders are hereby advised that meeting DBE subcontract goals or making a demonstrated good faith effort to meet such goals are conditions of being awarded and maintaining construction, procurement, or professional services contracts by the Board.

e. Restrictions on DBE Subcontracting

No **DBE** subcontractor or vendor selected to perform work as a **DBE** on a Sewerage and Water Board contract will be allowed to subcontract any portion of its work to a Non-

Board certified **DBE**, unless the work to be performed is necessary for the execution of the contract and there are no Board certified **DBE's** available to perform such work.

This process will require that each **DBE** participant performing work on a Sewerage and Water Board funded contract submit a request to subcontract out any portion of work deemed necessary for execution of the contract to the Board's **EDBP** office. On a form provided by the **EDBP** office, the **DBE** contractor or vendor will indicate the dollar amount of work to be subcontracted, the specific scope or nature of the work, the percentage of the total amount of work to be performed by the **DBE** subcontractor and vendor, and the entity to whom the work will be subcontracted.

Both prime and **DBE** subcontractors are advised that the failure to comply with these requirements may result in the loss of **DBE** certification and non-compliance by the prime contractor in meeting **DBE** contractual obligations.

f. Changes In DBE Participation

The Prime Contractor will not be allowed to make changes in DBE participation without submittal of a written request explaining reason, a revised Participation Summary Sheet and approval by the Director of the Economically Disadvantaged Business Program. Failure to comply with these requirements may result in non-compliance by the Prime Contractor in meeting DBE contractual obligations.

RIGHT TO AUDIT

The contractor will submit to any SWBNO audit, inspection, and review and, at the SWBNO's request, will make available all documents relating or pertaining to this Contract maintained by or under the control of the Contractor, it's employees, agents, assigns, successors and subcontractors, during normal business hours at the Contractor's office or place of business in Louisiana. If no such location is available, the Contractor will make the documents available at a time and location that is convenient for the SWBNO.

Administrative and financial records shall be made and kept by the contractor in accordance with generally accepted accounting principles and practices. Records shall include, but are not limited to, accounting records, daily reports, change order requests, correspondences and subcontract files (hard copies as well as computer readable data, if it can be made available). Records must be retained and made available upon request for a minimum for five (5) years following completion or formal acceptance of the contracted project.

The Contractor will abide by all provisions of City Code § 2-1120, including but not limited to City Code § 2-1120(12), which requires the Contractor to provide the Office of Inspector General with documents and information as requested. Failure to comply with such requests shall constitute a material breach of the Contract. The Contractor agrees that it is subject to the jurisdiction of the Orleans Parish Civil District Court for purposes of challenging a subpoena.

LANDSCAPING

Landscaping

TREE PROTECTION. At the field plan-in-hand meeting of each project, the Department of Streets and the Park and Parkway Commission will prepare a list which will state the location of each tree by station and distance off the survey base line and what work is required at each tree location. The list and what work is required at each tree location. The list will be enclosed in the project specifications.

- (a) The Contractor shall be responsible for damage to any City tree within the construction area and liable to the City for Compensation of damage.
- (b) The Contractor must notify the Parkway & Park commission, Tree Department at least three (3) working days prior to the beginning of construction.
- (c) The Contractor shall provide a Louisiana Licensed Arborist to perform necessary tree trimming, root pruning, or removal of any tree or stump on City property. A current list of licensed arborists may be obtained from:

Parkway & Park Commission Tree Department 2829 Gentilly Blvd New Orleans, LA 70122 Ph. (504) 284-2123 or 286-2100 Fax. (504) 286-2158

- (d) The Licensed Arborist must obtain a permit from the Parkway & Park Commission, Tree Department prior to working on any City Trees.
- (e) Prior to beginning construction, the Contractor must complete trimming trees requiring clearance for all new construction.
- (f) The attachment of signs, barricades, equipment or materials in any manner to any tree is prohibited.
- (g) Excavation within the dripline of any City tree is permitted only under existing roadbeds. All other excavation (i.e. street widening, neutral grounds, or sidewalks) within the dripline of any City trees will be inspected by the Parkway & Park Commission, Tree Department prior to beginning construction.
- (h) Trenching within the dripline of any City tree is not permitted Boring or hydraulic jacking is acceptable within the dripline if performed according to the following specifications. The boring or jacking must be a minimum depth of thirty inches (30") and begin ten feet (10') from the dripline of the tree and bore directly under the center of the tree's main stem. Placement of boring pits and direction of the boring must be approved by the Director prior to beginning construction. Under unusual conditions, the Director may approve alternative methods. Boring or jacking shall be incompliance with Section C728 "jacked or bored pipe."

PAYMENT AND PERFORMANCE BOND

Bond No.:	
KNOW ALL PERSONS BY THESE PRESENTS, That we,, as principal, (hereinafter called the "Principal"), and, as surety, (hereinafter called the "Surety"), are held and firmly bound unto, as Obligee, in the sum of, as Obligee, in the sum of, bound of, as obligee, in the sum of	b
WHEREAS, the Principal has entered into a Contract with Obligee dated, to perform construction work for("Contract").	m
NOW, THEREFORE, the condition of this obligation is such that if Principal shall promptly and faithful perform the Construction Work to be performed under the Contract, and shall promptly make payment Claimants, as hereinafter defined, for all labor and material actually used, consumed or incorporated in the performance of the Construction Work under the Contract, then this obligation shall be null and void; otherwise to remain in full force and effect.	o e
Surety's obligations hereunder to Obligee shall not arise unless Principal is in default under the Contract for failing to perform the Construction Work and has been declared by Obligee to be in default under the Contract for failing to perform the Construction Work; and Obligee has performed its obligations under the Contract. Ir such event, Surety shall have a reasonable period of time to:	

- 1. Upon entering into an acceptable written takeover agreement with Obligee, undertake to perform and complete the Construction Work to be done under the Contract; or
- 2. Obtain bids or negotiated proposals from qualified contractors for a contract for completion of the Construction Work to be done under the Contract, arrange for a contract to be prepared for execution by Obligee and contractor, to be secured with performance and payment bonds executed by a qualified surety; or
- 3. Waive its right to perform or complete the Construction Work pursuant to paragraphs 1 and 2 above, and with reasonable promptness under the circumstances: (a) After investigation, determine the amount for which it may be liable to the Obligee and, as soon as practicable after the amount is determined, tender payment therefor to the Obligee; or (b) Deny liability in whole or in part and notify the Obligee citing reasons therefor.
- 4. The Contract balance, as defined below, shall be credited against the reasonable construction cost of completing the Construction Work to be performed under the Contract. If completed by Obligee pursuant to paragraphs 2 or 3 above, and the reasonable construction cost of completing the Construction Work exceeds the Contract balance, Surety shall pay to Obligee such excess, but in no event shall the 156

aggregate liability of Surety exceed the amount of this bond. If Surety completes the work pursuant to paragraph 1 above, that portion of the Contract balance as may be required to complete the Construction Work to be done under the Contract and to reimburse Surety for its outlays shall be paid to Surety at the times and in the manner as said sums would have been payable to Principal had there been no default under the Contract. To the extent that Surety's outlays exceed the Contract balance paid to Surety by Obligee, Surety shall be entitled to a dollar for dollar reduction of its liability under this bond, and Surety's aggregate liability shall not exceed the penal sum of this bond. The term "Contract balance" as used herein shall mean the total amount payable by Obligee under the Contract and any amendments thereto, less the amounts properly paid by Obligee to Principal under the Contract. The term "Construction Work" as used herein shall mean the providing of all labor and/or material necessary to complete Principal's scope of work under the Contract. Notwithstanding any language in the Contract to the contrary, the Contract balance shall not be reduced or set off on account of any obligation, contractual or otherwise, except the reasonable construction cost incurred in completing the Construction Work.

- 5. Any suit by Obligee under this bond must be instituted before the earlier of: (a) the expiration of one year from the date of substantial completion of the Construction Work, or (b) one year after Principal ceased performing the Construction Work, excluding warranty work. If the public works bond statutes in the location where the Construction Work is being performed contains a statute of limitations for suits on the performance bond, then the limitation period set forth herein shall be read out of this bond and the statute of limitation set forth in the public works bond statutes shall be read into this bond. If the limitation set forth in this bond is void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable, and said period of limitation shall be deemed to have accrued and shall commence to run no later than (y) the date of substantial completion of the Construction Work, or (z) the date Principal ceased performing Construction Work, excluding warranty work, whichever occurs first.
- 6. A Claimant is defined as one other than Obligee having a contract with Principal or with a direct subcontractor of Principal to supply labor and/or materials and said labor and/or material is actually used, consumed or incorporated in the performance of the Construction Work under the Contract.
- 7. Principal and Surety hereby jointly and severally agree with Obligee that every Claimant as herein defined who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such Claimant's work or labor was done or performed or materials were furnished by such Claimant, may bring suit on this bond, prosecute the suit to final judgment for the amount due under Claimant's contract for the labor and/or material supplied by Claimant which was actually used, consumed or incorporated in the performance of the Construction Work, and have execution thereon; provided, however, that a Claimant having a direct contractual relationship with a subcontractor of Principal shall have a right of action on this bond only if said Claimant notifies Surety in writing of its claim within ninety (90) days from the date on which said Claimant did or supplied the last labor and/or materials for which the claim is made. Obligee shall not be liable for the payment of any costs or expenses of any such suit.
- 8. No suit or action shall be commenced hereunder by any Claimant after the expiration of the earlier of: (a) one year after the day on which Claimant last supplied the labor and/or materials for which the claim is made; or (b) the limitation period set forth in the public works bond statutes, if any, in the location where the construction work is being performed. Any limitation contained in this bond which is prohibited by any law controlling in the state where the suit is filed shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by the law of that state, and said period of limitation shall be deemed

to have accrued and shall commence to run on the day Claimant last supplied the labor and/or materials for which the claim is made.

- 9. No suit or action shall be commenced hereunder by Obligee or any Claimant other than in a state court of competent jurisdiction in the county or other political subdivision of the state in which the project, or any part thereof, is situated, or in the United States District Court for the district in which the project, or any part thereof, is situated, and not elsewhere.
- 10. The amount of this bond shall be reduced by and to the extent of any payment or payments made by Surety in good faith hereunder whether made directly to Obligee or Claimant(s) or otherwise in discharge of Principal's obligations. Surety's liability hereunder to Obligee and all Claimants is limited, singly, or in the aggregate, to the penal sum of the bond set forth herein. Surety may, at its option, discharge all obligations under this bond by interpleading into the registry of any court of competent jurisdiction of the full unused penal sum of this bond, or such portion thereof that will satisfy the obligations owed to Obligee and/or Claimant(s). No right of action shall accrue on this bond to any person or entity other than Obligee and/or Claimant(s). The bond shall not afford coverage for any liability of Principal for tortious acts, whether or not said liability is direct or is imposed by the Contract and shall not serve as or be a substitute for or supplemental to any liability or other insurance required by the Contract.
- 11. This bond is provided to comply with all statutory (including but not limited to La. R.S. 38:2216 and La. R.S. 38:2219) or other legal requirement for performing construction contracts for public owners in the location where the construction work is being performed. Except as provided in paragraphs 5 and 8 above, all provisions in the bond which are in addition to or differ from those statutory or legal requirements shall be read out of this bond, and all pertinent statutes and other legal requirements shall be read into the bond. This bond is a statutory bond, not a common law bond.

Signed this	day of	, 20		
			(Principal)	
		Ву:		
			(Surety)	
		Ву:		
				orney-in-Fact